

## ***Author Index to Volume 110***

Numbers in parentheses in italic type after the volume number are the issue numbers

- No. 1 January-February
- No. 2 March-April
- No. 3 May-June
- No. 4 July-August
- No. 5 September-October
- No. 6 November-December

### **A**

#### **Abbas, S.**

High-Precision Determination of the Neutron Coherent Scattering Length. Wagh, A. G., Abbas, S., **110**(3), 237 (2005).

#### **Abele, H.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

#### **Achiwa, N.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With "Low Temperature Fomblin." Yerofeimov, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

#### **Aldushchenkov, A. V.**

Two Coils Resonant Ramsey's Method for the Measurement of Time Reversal Invariance Violation in Neutron Transmission. Loukachevitch, V. V., Aldushchenkov, A. V., **110**(4), 465 (2005).

#### **Allen, R. R.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

#### **Altarev, I.**

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutzsmiedl, E., Hartmann, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Amziane, S.**

Measurement of Workability of Fresh Concrete Using a Mixing Truck. Amziane, S., Ferraris, C. F., Koehler, E. P., **110(1)**, 55 (2005).

**Anderman, R.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110(4)**, 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “*a*”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110(4)**, 431 (2005).

**Andreev, A. Z.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhev, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110(4)**, 345 (2005).

**Antonucci, J. M.**

Chemistry of Silanes: Interfaces in Dental Polymers and Composites. Antonucci, J. M., Dickens, S. H., Fowler, B. O., Xu, H. H. K., McDonough, W. G., **110(5)**, 541 (2005).

**Arif, M.**

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110(3)**, 137 (2005).

**Atchison, F.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110(4)**, 491 (2005).

**B**

**Babcock, E.**

Polarized <sup>3</sup>He Spin Filters for Slow Neutron Physics. Gentile, T. R., Chen, W. C., Jones, G. L., Babcock, E., Walker, T. G., **110(3)**, 299 (2005).

**Badurek, G.**

Measurement of the Coherent Neutron Scattering Length of <sup>3</sup>He. Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110(3)**, 241 (2005).

**Baeßler, S.**

Investigation of the Neutron Quantum States in the Earth’s Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110(3)**, 263 (2005).

<sup>3</sup>He Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110(3)**, 293 (2005).

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110(4)**, 377 (2005).

**Balashov, S.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S.,

Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “*a*”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

### Ban, G.

First Tests of  ${}^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Baranova, T. A.

Investigation of the Neutron Quantum States in the Earth’s Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

### Baron, M.

Measurement of the Coherent Neutron Scattering Length of  ${}^3\text{He}$ . Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110**(3), 241 (2005).

### Bartel, T.

Uncertainty in NIST Force Measurements. Bartel, T., **110**(6), 589 (2005).

### Bass, C. D.

Measurement of the Parity-Violating Neutron Spin Rotation in  ${}^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

### Bateman, F. B.

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “*a*”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

### Batz, M.

${}^3\text{He}$  Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

### Baxter, D. V.

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

### Bazarov, B. A.

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhev, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

**Beck, M.**

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistrny, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

**Beise, E. J.**

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

**Bernard, V.**

Radiative Neutron  $\beta$ -Decay in Effective Field Theory. Gardner, S., Bernard, V., Meißner, U. G., Zhang, C., **110**(4), 411 (2005).

**Bialek, A.**

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistrny, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

**Bison, G.**

Design and Performance of Laser-Pumped Cs-Magnetometers for the Planned UCN EDM Experiment at PSI. Groeger, S., Bison, G., Weis, A., **110**(3), 179 (2005).

**Bodek, K.**

First Tests of  ${}^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Flécharde, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistrny, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

Investigation of Solid  $\text{D}_2$  for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryś, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Borisov, Y.**

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

**Börner, H. G.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

**Bowers, M.**

A Gamma Polarimeter for Neutron Polarization Measurement in a Liquid Deuterium Target for Parity Violation in Polarized Neutron Capture on Deuterium. Komives, A., Sint, A. K., Bowers, M., Snow, M., **110**(3), 221 (2005).

**Bowman, J. D.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Precision Neutron Polarimetry for Neutron Beta Decay. Penttila, S. I., Bowman, J. D., **110**(3), 309 (2005).

On the Measurement the Neutron Lifetime Using Ultracold Neutrons in a Vacuum Quadrupole Trap. Bowman, J. D., Penttila, S. I., **110**(4), 361 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

On the Measurement of the Electron-Neutrino Correlation in Neutron Beta Decay. Bowman, J. D., **110**(4), 407 (2005).

Detector Development for the abBA Experiment. Seo, P.-N., Bowman, J. D., Mitchell, G. S., Penttila, S. I., Wilburn, W. S., **110**(4), 427 (2005).

Simulation of Charged Particle Trajectories in the Neutron Decay Correlation Experiment abBA. Desai, D., Greene, G., Mahurin, R., Bowman, D., Calarco, J., **110**(4), 443 (2005).

**Britton, C. L.**

Development of a Position Sensitive Neutron Detector With High Efficiency and Energy Resolution for Use at High-Flux Beam Sources. Markoff, D. M., Cianciolo, V., Britton, C. L., Cooper, R. G., Greene, G. L., **110**(4), 449 (2005).

**Bröcker, J.**

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutzmiedl, E., Hartmann, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Brys, T.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szalc, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fetscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kužniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Bunatian, G. G.

Standard Model Treatment of the Radiative Corrections to Neutron  $\beta$ -Decay. Bunatian, G. G., **110**(4), 319 (2005).

### Butterworth, J.

Observation on the Visibility Decrease in a VCN Spin Resonator Interferometry. Utsuro, M., Hino, M., Geltenbort, P., Butterworth, J., **110**(3), 245 (2005).

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

### Byrne, J.

Determination of the Electron-Antineutrino Angular Correlation Coefficient  $a_0$  in Unpolarized Neutron  $\beta$ -Decay. Byrne, J., **110**(4), 395 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

## C

### Cage, M. E.

Temperature Dependence of the Hall and Longitudinal Resistances in a Quantum Hall Resistance Standard. Matthews, J., Cage, M. E., **110**(5), 497 (2005).

### Calarco, J. R.

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Simulation of Charged Particle Trajectories in the Neutron Decay Correlation Experiment abBA. Desai, D., Greene, G., Mahurin, R., Bowman, D., Calarco, J., **110**(4), 443 (2005).

### Cameron, J. M.

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

### Carlini, R. D.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman,

F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### Case, T.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

### Chen, W. C.

Polarized <sup>3</sup>He Spin Filters for Slow Neutron Physics. Gentile, T. R., Chen, W. C., Jones, G. L., Babcock, E., Walker, T. G., **110**(3), 299 (2005).

### Chernuhin, Y. I.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Chupp, T. E.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Cianciolo, T. V.

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, T. V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Simulation of the Performance of a Fundamental Neutron Physics Beamline at the High Flux Isotope Reactor. Mahurin, R., Greene, G., Kohler, P., Cianciolo, V., **110**(3), 157 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the

Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, T. V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Development of a Position Sensitive Neutron Detector With High Efficiency and Energy Resolution for Use at High-Flux Beam Sources. Markoff, D. M., Cianciolo, V., Britton, C. L., Cooper, R. G., Greene, G. L., **110**(4), 449 (2005).

### Clark, C. W.

On the Absorption Spectrum of Noble Gases at the Arc Spectrum Limit. Fano, U., Pupillo, G., Zannoni, A., Clark, C. W., **110**(6), 583 (2005).

### Coakley, K. J.

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Chaotic Scattering and Escape Times of Marginally Trapped Ultracold Neutrons. Coakley, K. J., Doyle, J. M., Dzhosyuk, S. N., Yang, L., Huffman, P. R., **110**(4), 367 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

### Collett, B.

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R.,

Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

### Cook, L. P.

Ba(OH)<sub>2</sub> Equilibria in the System Ba-O-H-F, With Application to the Formation of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6.5+x</sub> From BaF<sub>2</sub>-Precursors. Cook, L. P., Wong-Ng, W., Feenstra, R., **110**(2), 115 (2005).

### Cooper, M. D.

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

### Cooper, R. G.

Development of a Position Sensitive Neutron Detector With High Efficiency and Energy Resolution for Use at High-Flux Beam Sources. Markoff, D. M., Cianciolo, V., Britton, C. L., Cooper, R. G., Greene, G. L., **110**(4), 449 (2005).

### Copete, A.

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

### Coulter, K. P.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda,

Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### Crawford, B. E.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Czarnecki, A.

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kužniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Czekaj, S.

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szalc, A., Tanner, L., **110**(3), 173 (2005).

### D

### Dabaghyan, M.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### Daum, M.

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szalc, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

#### Davis, E. D.

Bounds on Time Reversal Violation From Polarized Neutron Capture With Unpolarized Targets. Davis, E. D., Gould, C. R., Mitchell, G. E., Sharapov, E. I., **110**(4), 485 (2005).

#### Dawkins, J. M.

Measurement of the Parity-Violating Neutron Spin Rotation in <sup>4</sup>He. Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

#### De Souza, R. T.

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

#### Deissenroth, M.

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

#### Derenchuk, V.

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron,

J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).  
**Desai, D.**

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Simulation of Charged Particle Trajectories in the Neutron Decay Correlation Experiment abBA. Desai, D., Greene, G., Mahurin, R., Bowman, D., Calarco, J., **110**(4), 443 (2005).

**Dewey, M. S.**

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “ $a$ ”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

**DeWitt, D. P.**

A Summary of Heat-Flux Sensor Calibration Data. Murthy, A. V., Fraser, G. T., DeWitt, D. P., **110** (2), 97 (2005).

**Dickens, S. H.**

Chemistry of Silanes: Interfaces in Dental Polymers and Composites. Antonucci, J. M., Dickens, S. H., Fowler, B. O., Xu, H. H. K., McDonough, W. G., **110**(5), 541 (2005).

**Doyle, J. M.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Chaotic Scattering and Escape Times of Marginally Trapped Ultracold Neutrons. Coakley, K. J., Doyle, J. M., Dzhosyuk, S. N., Yang, L., Huffman, P. R., **110**(4), 367 (2005).

**Dubbers, D.**

Conference Summary. Dubbers, D., **110**(4), 495 (2005).

**Dzhosyuk, S. N.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Chaotic Scattering and Escape Times of Marginally Trapped Ultracold Neutrons. Coakley, K. J., Doyle, J. M., Dzhosyuk, S. N., Yang, L., Huffman, P. R., **110**(4), 367 (2005).

**E**

**Eykens, R.**

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

**Ezhov, V. F.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

**F**

**Faller, J. E.**

The Measurement of Little  $g$ : A Fertile Ground for Precision Measurement Science. Faller, J. E., **110**(6), 559 (2005).

**Fano, U.**

On the Absorption Spectrum of Noble Gases at the Arc Spectrum Limit. Fano, U., Pupillo, G., Zannoni, A., Clark, C. W., **110**(6), 583 (2005).

**Fowler, B. O.**

Chemistry of Silanes: Interfaces in Dental Polymers and Composites. Antonucci, J. M., Dickens, S. H., Fowler, B. O., Xu, H. H. K., McDonough, W. G., **110**(5), 541 (2005).

**Feenstra, R.**

Ba(OH)<sub>2</sub> Equilibria in the System Ba-O-H-F, With Application to the Formation of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6.5+x</sub> From BaF<sub>2</sub>-Precursors. Cook, L. P., Wong-Ng, W., Feenstra, R., **110**(2), 115 (2005).

**Fei, X.**

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

**Ferraris, C. F.**

Measurement of Workability of Fresh Concrete Using a Mixing Truck. Amziane, S., Ferraris, C. F., Koehler, E. P., **110**(1), 55 (2005).

Developing a More Rapid Test to Assess Sulfate Resistance of Hydraulic Cements. Ferraris, C., Stutzman, P., Peltz, M., Winpigler, J., **110**(5), 529 (2005).

**Fetscher, W.**

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fetscher, W., Gorel, P., Kirch, K., Kistrny, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

**Fierlinger, P.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kužniak, M., Kuehne, G., Pichlmaier, A., Siódmodk, A., Szeli, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

First Tests of <sup>6</sup>Li Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchar, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

#### Filipp, S.

Spatial Non-Cyclic Geometric Phase in Neutron Interferometry. Filipp, S., Hasegawa, Y., Loidl, R., Rauch, H., **110**(3), 251 (2005).

#### Fisher, B. M.

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerzolimsky, B. G., **110**(4), 401 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

#### Flechard, X.

First Tests of <sup>6</sup>Li Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

#### Fomin, A.

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Shablii, A., Kotina, I., Khusainov, A., Fomin, A., Pustovoit, A., Vasiliev, A.,

Kon'kov, O., Geltenbort, P., Serebrov, A., Solovei, V., Borisov, Y., Lasakov, M., **110**(3), 289 (2005).

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoshekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

#### Fraser, G. T.

A Summary of Heat-Flux Sensor Calibration Data. Murthy, A. V., Fraser, G. T., DeWitt, D. P., **110**(2), 97 (2005).

#### Freedman, S. J.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

**Frleček, E.**

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Monte Carlo Study of the abBA Experiment: Detector Response and Physics Analysis. Frleček, E., **110**(4), 437 (2005).

**Fukuda, Y.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Furman, W. I.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**G**

**Gagarski, A. M.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

**Gaigalas, A. K.**

Quantitating Fluorescence Intensity From Fluorophore: Assignment of MESF Values. Gaigalas, A. K., Wang, L., Schwartz, A., Marti, G. E., Vogt, R. F., **110**(2), 101 (2005).

**Gardner, S.**

Radiative Neutron  $\beta$ -Decay in Effective Field Theory. Gardner, S., Bernard, V., Meißner, U. G., Zhang, C., **110**(4), 411 (2005).

**Geltenbort, P.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

Observation on the Visibility Decrease in a VCN Spin Resonator Interferometry. Utsuro, M., Hino, M., Geltenbort, P., Butterworth, J., **110**(3), 245 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

First Tests of  ${}^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerzolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryś, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Gentile, T. R.

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C

and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Polarized <sup>3</sup>He Spin Filters for Slow Neutron Physics. Gentile, T. R., Chen, W. C., Jones, G. L., Babcock, E., Walker, T. G., **110**(3), 299 (2005).

A New Method for Precision Cold Neutron Polarimetry Using a <sup>3</sup>He Spin Filter. Wietfeldt, F. E., Gentile, T. R., **110**(3), 305 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

### George, D.

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szalc, A., Tanner, L., **110**(3), 173 (2005).

### Gericke, M. T.

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

### Giersch, M.

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kužniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Gilliam, D. M.

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

### Gillis, R. C.

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D.,

Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

### Glück, F.

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

### Glushkov, A. A.

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev,

A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

### **Glushkov, A. G.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

### **Goldin, L.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

### **Golub, R.**

Search for a Neutron Electric Dipole Moment. Golub, R., Huffman, P. R., **110**(3), 169 (2005).

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

### **Gorel, P.**

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### **Gould, C. R.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Bounds on Time Reversal Violation From Polarized Neutron Capture With Unpolarized Targets. Davis, E. D., Gould, C. R., Mitchell, G. E., Sharapov, E. I., **110**(4), 485 (2005).

### **Greene, G.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

### **Greene, G. L.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Simulation of the Performance of a Fundamental Neutron Physics Beamline at the High Flux Isotope Reactor. Mahurin, R., Greene, G., Kohler, P., Cianciolo, V., **110**(3), 157 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda,

Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Simulation of Charged Particle Trajectories in the Neutron Decay Correlation Experiment abBA. Desai, D., Greene, G., Mahurin, R., Bowman, D., Calarco, J., **110**(4), 443 (2005).

Development of a Position Sensitive Neutron Detector With High Efficiency and Energy Resolution for Use at High-Flux Beam Sources. Markoff, D. M., Cianciolo, V., Britton, C. L., Cooper, R. G., Greene, G. L., **110**(4), 449 (2005).

### Groeger, S.

Design and Performance of Laser-Pumped Cs-Magnetometers for the Planned UCN EDM Experiment at PSI. Groeger, S., Bison, G., Weis, A., **110**(3), 179 (2005).

### Groshev, M. N.

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhev, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

### Grzywacz, R. K.

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Gudkov, V.

Radiative Corrections for Neutron Decay and Search for New Physics. Gudkov, V., Kubodera, K., Myrer, F., **110**(4), 315 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Gupta, M.

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I.,

Bröcker, J., Gutsmiedl, E., Hartmann, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

## H

### Hanson, D. W.

The GOES Time Code Service, 1974-2004: A Retrospective. Lombardi, M. A., Hanson, D. W., **110**(2), 79 (2005).

### Hartman, F. J.

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

### Hartmann, J.

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmiedl, E., Hartmann, M. J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

### Hasegawa, Y.

Spatial Non-Cyclic Geometric Phase in Neutron Interferometry. Filipp, S., Hasegawa, Y., Loidl, R., Rauch, H., **110**(3), 251 (2005).

### Hautle, P.

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Heckel, B. R.

Measurement of the Parity-Violating Neutron Spin Rotation in <sup>4</sup>He. Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

### Heil, W.

Measurement of the Coherent Neutron Scattering Length of <sup>3</sup>He. Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110**(3), 241 (2005).

<sup>3</sup>He Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

### Henneck, R.

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siódmod, A., Szczec, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Herczeg, P.

The T-Odd *R* and *D* Correlations in Beta Decay. Herczeg, P., **110**(4), 453 (2005).

**Hersman, F. W.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frle, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

**Heule, S.**

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

**Hino, M.**

Observation on the Visibility Decrease in a VCN Spin Resonator Interferometry. Utsuro, M., Hino, M., Geltenbort, P., Butterworth, J., **110**(3), 245 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Hochman, Z.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szczec, A., Tanner, L., **110**(3), 173 (2005).

**Howell, C. R.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**Huerto, R. R.**

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

## Huffman, P. R.

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Search for a Neutron Electric Dipole Moment. Golub, R., Huffman, P. R., **110**(3), 169 (2005).

Measurement of the Parity-Violating Neutron Spin Rotation in  ${}^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Chaotic Scattering and Escape Times of Marginally Trapped Ultracold Neutrons. Coakley, K. J., Doyle, J. M., Dzhosyuk, S. N., Yang, L., Huffman, P. R., **110**(4), 367 (2005).

## I

## Ino, T.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  ${}^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D.,

Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

On the Way to Experimental Test of the Time Reversal Invariance in the Nuclear Reactions. Skoy, V. R., Ino, T., Masuda, Y., Muto, S., Kim, G., **110**(4), 471 (2005).

A Ramsey's Method With Pulsed Neutrons for a T-Violation Experiment. Masuda, Y., Ino, T., Muto, S., Skoy, V., **110**(4), 481 (2005).

## Ishimoto, S.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

## J

## Jacobson, D. L.

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T.

R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

### Jones, G. L.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T.

R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Polarized <sup>3</sup>He Spin Filters for Slow Neutron Physics. Gentile, T. R., Chen, W. C., Jones, G. L., Babcock, E., Walker, T. G., **110**(3), 299 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S.,

Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

### K

### Kacker, R.

A Survey of Tables of Probability Distributions. Kacker, R. N., Olkin, I., **110**(1), 67 (2005).

### Kaiser, H.

Virtual Excitation and Multiple Scattering Correction Terms to the Neutron Index of Refraction for Hydrogen. Schoen, K., Snow, W. M., Kaiser, H., Werner, S. A., **110**(3), 259 (2005).

### Kasprzak, M.

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szczelc, A., Tanner, L., **110**(3), 173 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### Ketter, W.

Measurement of the Coherent Neutron Scattering Length of <sup>3</sup>He. Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110**(3), 241 (2005).

**Khafizov, R. U.**

Search for Radiative  $\beta$ -Decay of the Free Neutron.  
Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

**Kharitonov, A.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

**Khusainov, A.**

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

**Kim, G.**

On the Way to Experimental Test of the Time Reversal Invariance in the Nuclear Reactions. Skoy, V. R., Ino, T., Masuda, Y., Muto, S., Kim, G., **110**(4), 471 (2005).

**Kim, J. H.**

Slip Correction Measurements of Certified PSL Nanoparticles Using a Nanometer Differential Mobility Analyzer (Nano-DMA) for Knudsen Number From 0.5 to 83. Kim, J. H., Mulholland, G. W., Kukuck, S. R., Pui, D. Y H., **110**(1), 31 (2005).

**Kirch, K.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szeli, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

First Tests of  $^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchar, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

Investigation of Solid  $\text{D}_2$  for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryś, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Kiriluk, K. G.**

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

**Kistryn, S.**

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fetscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuzniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

**Knyazkov, V. A.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

**Koehler, E. P.**

Measurement of Workability of Fresh Concrete Using a Mixing Truck. Amziane, S., Ferraris, C. F., Koehler, E. P., **110**(1), 55 (2005).

**Koehler, P.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

**Kohlbrecher, J.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak,

M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Kohler, P.**

Simulation of the Performance of a Fundamental Neutron Physics Beamline at the High Flux Isotope Reactor. Mahurin, R., Greene, G., Kohler, P., Cianciolo, V., **110**(3), 157 (2005).

**Kohlrik, K.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siódmod, A., Szeli, A., Tanner, L., **110**(3), 173 (2005).

**Kohmoto, T.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Komives, A.**

A Gamma Polarimeter for Neutron Polarization Measurement in a Liquid Deuterium Target for Parity Violation in Polarized Neutron Capture on Deuterium. Komives, A., Sint, A. K., Bowers, M., Snow, M., **110**(3), 221 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerzolimsky, B. G., **110**(4), 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “a”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

**Kon'kov, O.**

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

**Konopka, T.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerzolimsky, B. G., **110**(4), 401 (2005).

**Konter, J. A.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Korobkina, E.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

**Korolev, V.**

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

**Kotina, I.**

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

**Kovrzhnykh, N. A.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrzhnykh, N. A., **110**(4), 345 (2005).

**Kozela, A.**

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

**Kozlov, V. U.**

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

**Krasnoschekova, I.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

**Krasnoshekova, I.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

**Kreft, T.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

**Krempel, J.**

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

**Kreuz, M.**

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

**Krygin, G. B.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

**Kubodera, K.**

Radiative Corrections for Neutron Decay and Search for New Physics. Gudkov, V., Kubodera, K., Myrer, F., **110**(4), 315 (2005).

**Kuehne, G.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szczelc, A., Tanner, L., **110**(3), 173 (2005).

**Kühne, G.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Kukuck, S. R.**

Slip Correction Measurements of Certified PSL Nanoparticles Using a Nanometer Differential Mobility Analyzer (Nano-DMA) for Knudsen Number From 0.5 to 83. Kim, J. H., Mulholland, G. W., Kukuck, S. R. Pui, D. Y. H., **110**(1), 31 (2005).

**Kuźniak, M.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szczelc, A., Tanner, L., **110**(3), 173 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Kwon, O.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

**L**

**Labalme, M.**

First Tests of  ${}^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

**Lamberty, A.**

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

**Lamoreaux, S. K.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

**Larson, D. R.**

The “Median” Method for the Reduction of Noise and Trigger Jitter on Waveform Data. Paulter, N. G., Larson, D. R., **110**(5), 511 (2005).

**Lasakov, M.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A.,

Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablinskii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

**Lauss, B.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  ${}^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### Lavelle, C.

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

### Lefort, T.

First Tests of  $^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

### Leuschner, M. B.

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  $^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L.,

Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

### Levakov, B. G.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Liénard, E.

First Tests of  $^6\text{Li}$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

### Lindroth, A.

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Litvin, V. I.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I.,

Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### **Loidl, R.**

Spatial Non-Cyclic Geometric Phase in Neutron Interferometry. Filipp, S., Hasegawa, Y., Loidl, R., Rauch, H., **110**(3), 251 (2005).

Measurement of the Coherent Neutron Scattering Length of  $^3\text{He}$ . Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110**(3), 241 (2005).

### **Lombardi, M. A.**

The GOES Time Code Service, 1974-2004: A Retrospective. Lombardi, M. A., Hanson, D. W., **110**(2), 79 (2005).

### **Lone, A.**

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

### **Long, J.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

### **Losowski, B.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W.

D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  $^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### **Loukachevitch, V. V.**

Two Coils Resonant Ramsey's Method for the Measurement of Time Reversal Invariance Violation in Neutron Transmission. Loukachevitch, V. V., Aldushchenkov, A. V., **110**(4), 465 (2005).

### **Lucovac, L.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

### **Luo, D.**

Measurement of the Parity-Violating Neutron Spin Rotation in  $^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

### **Luschikov, V.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With "Low Temperature Fomblin." Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

### Lychagin, E. V.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Lyzhin, A. E.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

## M

### Märkisch, B.

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

### Magda, W. P.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Mahurin, R.

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Simulation of the Performance of a Fundamental Neutron Physics Beamline at the High Flux Isotope Reactor. Mahurin, R., Greene, G., Kohler, P., Cianciolo, V., **110**(3), 157 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Simulation of Charged Particle Trajectories in the Neutron Decay Correlation Experiment abBA. Desai, D., Greene, G., Mahurin, R., Bowman, D., Calarco, J., **110**(4), 443 (2005).

### Makela, M.

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

### Mammei, R.

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

### Markoff, D. M.

Measurement of the Parity-Violating Neutron Spin Rotation in  $^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

Parity-Violating Neutron Spin Rotation in a Liquid Parahydrogen Target. Markoff, D. M., **110**(3), 209 (2005).

Development of a Position Sensitive Neutron Detector With High Efficiency and Energy Resolution for Use at High-Flux Beam Sources. Markoff, D. M., Cianciolo, V., Britton, C. L., Cooper, R. G., Greene, G. L., **110**(4), 449 (2005).

### Marti, G. E.

Quantitating Fluorescence Intensity From Fluorophore: Assignment of MESF Values. Gaigalas, A. K., Wang, L., Schwartz, A., Marti, G. E., Vogt, R. F., **110**(2), 101 (2005).

### Masuda, Y.

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  $^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

On the Way to Experimental Test of the Time Reversal Invariance in the Nuclear Reactions. Skoy, V. R., Ino, T., Masuda, Y., Muto, S., Kim, G., **110**(4), 471 (2005).

A Ramsey's Method With Pulsed Neutrons for a T-Violation Experiment. Masuda, Y., Ino, T., Muto, S., Skoy, V., **110**(4), 481 (2005).

### Matthews, J.

Temperature Dependence of the Hall and Longitudinal Resistances in a Quantum Hall Resistance Standard. Matthews, J., Cage, M. E., **110**(5), 497 (2005).

### McDonough, W. G.

Chemistry of Silanes: Interfaces in Dental Polymers and Composites. Antonucci, J. M., Dickens, S. H., Fowler, B. O., Xu, H. H. K., McDonough, W. G., **110**(5), 541 (2005).

### Meißner, U. G.

Radiative Neutron  $\beta$ -Decay in Effective Field Theory. Gardner, S., Bernard, V., Meißner, U. G., Zhang, C., **110**(4), 411 (2005).

### Micherdzinska, A.

Measurement of the Parity-Violating Neutron Spin Rotation in  $^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

**Mishima, K.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryš, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Mitchell, G. E.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

Bounds on Time Reversal Violation From Polarized Neutron Capture With Unpolarized Targets. Davis, E. D., Gould, C. R., Mitchell, G. E., Sharapov, E. I., **110**(4), 485 (2005).

**Mitchell, G. S.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., **110**(3), 273 (2005).

Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frile, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Detector Development for the abBA Experiment. Seo, P.-N., Bowman, J. D., Mitchell, G. S., Penttila, S. I., Wilburn, W. S., **110**(4), 427 (2005).

**Mitchell, W. F.**

Hamiltonian Paths Through Two- and Three-Dimensional Grids. Mitchell, W. F., **110**(2), 127 (2005).

**Momose, T.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Moriai, A.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Morozov, T.**

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110(4)**, 383 (2005).

**Mostovoi, Y. A.**

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110(4)**, 415 (2005).

**Mostovoy, Y.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110(4)**, 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “ $a$ ”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110(4)**, 431 (2005).

**Mulholland, G. W.**

Re-Analysis of the Uncertainty of the  $0.895\text{ }\mu\text{m}$  Diameter (NIST SRM® 1690) and the  $0.269\text{ }\mu\text{m}$  Diameter (NIST SRM® 1691) Sphere Standards. Mulholland, G. W., **110(1)**, 27 (2005).

Slip Correction Measurements of Certified PSL Nanoparticles Using a Nanometer Differential Mobility Analyzer (Nano-DMA) for Knudsen Number From 0.5 to 83. Kim, J. H., Mulholland, G. W., Kukuck, S. R. Pui, D. Y H., **110(1)**, 31 (2005).

**Müller, A.**

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmiedl, E., Hartman, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110(4)**, 357 (2005).

**Mumm, H. P.**

Measurement of the Parity-Violating Neutron Spin Rotation in  ${}^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110(3)**, 205 (2005).

**Mund, D.**

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110(4)**, 377 (2005).

**Murashkin, A.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110(3)**, 185 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110(4)**, 383 (2005).

**Murthy, A. V.**

A Summary of Heat-Flux Sensor Calibration Data. Murthy, A. V., Fraser, G. T., DeWitt, D. P., **110** (2), 97 (2005).

**Muta, S.**

On the Way to Experimental Test of the Time Reversal Invariance in the Nuclear Reactions. Skoy, V. R., Ino, T., Masuda, Y., Muto, S., Kim, G., **110**(4), 471 (2005).

**Muto, S.**

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

A Ramsey's Method With Pulsed Neutrons for a T-Violation Experiment. Masuda, Y., Ino, T., Muto, S., Skoy, V., **110**(4), 481 (2005).

**Muzichka, A. Y.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**Myhrer, F.**

Radiative Corrections for Neutron Decay and Search for New Physics. Gudkov, V., Kubodera, K., Myrer, F., **110**(4), 315 (2005).

**N**

**Nagai, Y.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K.,

Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Nann, H.**

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

**Naviliat-Cuncic, O.**

First Tests of  $^6Li$  Doped Glass Scintillators for Ultracold Neutron Detection. Ban, G., Fléchard, X., Labalme, M., Lefort, T., Liénard, E., Naviliat-Cuncic, O., Fierlinger, P., Kirch, K., Bodek, K., Geltenbort, P., **110**(3), 283 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J.,

Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Nekhaev, G. V.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### Nesvizhevsky, V. V.

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

Constraints on Non-Newtonian Gravity From the Experiment on Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Protasov, K. V., **110**(3), 269 (2005).

### Newell, D.

Details of the 1998 Watt Balance Experiment Determining the Planck Constant. Steiner, R., Newell, D., Williams, E., **110**(1), 1 (2005).

### Nico, J. S.

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

Measurement of the Parity-Violating Neutron Spin Rotation in  ${}^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

## O

### O'Donnell, J. M.

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleć, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Okumura, K.

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

### Olkın, I.

A Survey of Tables of Probability Distributions. Kacker, R. N., Olkin, I., **110**(1), 67 (2005).

**Otten, E. W.**

$^3\text{He}$  Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

**P**

**Page, S. A.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  $^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

**Palmquist, G. R.**

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

**Paul, S.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev,

A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmedl, E., Hartman, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Paulter, N. G.**

The “Median” Method for the Reduction of Noise and Trigger Jitter on Waveform Data. Paulter, N. G., Larson, D. R., **110**(5), 511 (2005).

**Pauwels, J.**

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

**Peltz, M.**

Developing a More Rapid Test to Assess Sulfate Resistance of Hydraulic Cements. Ferraris, C., Stutzman, P., Peltz, M., Winpigler, J., **110**(5), 529 (2005).

**Penttila, S. I.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W.

D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Precision Neutron Polarimetry for Neutron Beta Decay. Penttila, S. I., Bowman, J. D., **110**(3), 309 (2005)

On the Measurement the Neutron Lifetime Using Ultracold Neutrons in a Vacuum Quadrupole Trap. Bowman, J. D., Penttila, S. I., **110**(4), 361 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Detector Development for the abBA Experiment. Seo, P.-N., Bowman, J. D., Mitchell, G. S., Penttila, S. I., Wilburn, W. S., **110**(4), 427 (2005).

### **Peralta, G.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

### **Petrov, G. A.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V.,

Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

### **Petukhov, A. K.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

### **Pichlmaier, A.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szczelc, A., Tanner, L., **110**(3), 173 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With "Low Temperature Fomblin." Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

### **Picker, R.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev,

A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmiedl, E., Hartman, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

### Pocanic, D.

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Pokotilovski, Y.

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

### Poster, D. L.

Preparation of Reference Material 8504, Transformer Oil. Poster, D. L., Schantz, M. M., Wise, S. A., **110**(6), 613 (2005).

### Protasov, K. V.

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

Constraints on Non-Newtonian Gravity From the Experiment on Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Protasov, K. V., **110**(3), 269 (2005).

### Pui, D. Y. H.

Slip Correction Measurements of Certified PSL Nanoparticles Using a Nanometer Differential Mobility Analyzer (Nano-DMA) for Knudsen Number From 0.5 to 83. Kim, J. H., Mulholland, G. W., Kukuck, S. R., Pui, D. Y. H., **110**(1), 31 (2005).

### Pulut, J.

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Pupillo, G.

On the Absorption Spectrum of Noble Gases at the Arc Spectrum Limit. Fano, U., Pupillo, G., Zannoni, A., Clark, C. W., **110**(6), 583 (2005).

### Pusenkov, V.

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1\text{--}2)\times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

### Pustovoit, A.

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablil, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

R

**Rakhecha, V. C.**

SUSANS With Polarized Neutrons. Wagh, A. G., Rakhecha, V. C., Strobl, M., Treimer, W., **110**(3), 231 (2005).

**Ramsay, W. D.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

**Ratz, D.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Rauch, H.**

Measurement of the Coherent Neutron Scattering Length of <sup>3</sup>He. Ketter, W., Heil, W., Badurek, G., Baron, M., Loidl, R., Rauch, H., **110**(3), 241 (2005).

Spatial Non-Cyclic Geometric Phase in Neutron Interferometry. Filipp, S., Hasegawa, Y., Loidl, R., Rauch, H., **110**(3), 251 (2005).

**Rinckel, T.**

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

**Rozhnov, O.**

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

**Rudersdorf, D.**

<sup>3</sup>He Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

**Rudnev, Y.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1\text{--}2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zhrebtssov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

**Ryabov, V. L.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

**Rykaczewski, K. P.**

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frle, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

**S**

**Santra, S.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N.,

Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

**Sarsour, M.**

Measurement of the Parity-Violating Neutron Spin Rotation in <sup>4</sup>He. Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

**Schantz, M. M.**

Preparation of Reference Material 8504, Transformer Oil. Poster, D. L., Schantz, M. M., Wise, S. A., **110**(6), 613 (2005).

**Schebetov, A.**

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1\text{--}2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zhrebts, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

**Schmiedeskamp, J.**

<sup>3</sup>He Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

**Schoen, K.**

Virtual Excitation and Multiple Scattering Correction Terms to the Neutron Index of Refraction for Hydrogen. Schoen, K., Snow, W. M., Kaiser, H., Werner, S. A., **110**(3), 259 (2005).

**Schott, W.**

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmedl, E., Hartman, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Schumann, M.**

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

**Schwartz, A.**

Quantitating Fluorescence Intensity From Fluorophore: Assignment of MESF Values. Gaigalas, A. K., Wang, L., Schwartz, A., Marti, G. E., Vogt, R. F., **110**(2), 101 (2005).

**Seo, P.-N.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D.,

Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Detector Development for the abBA Experiment. Seo, P.-N., Bowman, J. D., Mitchell, G. S., Penttila, S. I., Wilburn, W. S., **110**(4), 427 (2005).

**Serebrov, A. P.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablil, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoshekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhov, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1\text{--}2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A.,

Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kužniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kužniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

#### Severijns, N.

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Brys, T., Czarnecki, A., Petscher, W., Gorel, P., Kirch, K., Kistyn, S., Kozela, A., Kužniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

#### Shablii, A.

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

#### Sharapov, E. I.

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S.,

Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

Bounds on Time Reversal Violation From Polarized Neutron Capture With Unpolarized Targets. Davis, E. D., Gould, C. R., Mitchell, G. E., Sharapov, E. I., **110**(4), 485 (2005).

#### Shima, T.

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Morai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

### **Shvetsov, V. N.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

### **Sint, A. K.**

A Gamma Polarimeter for Neutron Polarization Measurement in a Liquid Deuterium Target for Parity Violation in Polarized Neutron Capture on Deuterium. Komives, A., Sint, A. K., Bowers, M., Snow, W. M., **110**(3), 221 (2005).

### **Siódmod, A.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siódmod, A., Szalc, A., Tanner, L., **110**(3), 173 (2005).

### **Skoy, V. R.**

On the Way to Experimental Test of the Time Reversal Invariance in the Nuclear Reactions. Skoy, V. R., Ino, T., Masuda, Y., Muto, S., Kim, G., **110**(4), 471 (2005).

A Ramsey's Method With Pulsed Neutrons for a T-Violation Experiment. Masuda, Y., Ino, T., Muto, S., Skoy, V., **110**(4), 481 (2005).

### **Smith, T. B.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B.,

Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $B_4C$  and  $^{27}Al$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### **Snow, W. M.**

The Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Greene, G., Cianciolo, V., Koehler, P., Allen, R., Snow, W. M., Huffman, P., Gould, C., Bowman, D., Cooper, M., Doyle, J., **110**(3), 149 (2005).

LENS: A New Pulsed Neutron Source for Research and Education. Leuschner, M., Baxter, D. V., Cameron, J. M., Derenchuk, V., Lavelle, C., Lone, A., Nann, H., Rinckel, T., Snow, W. M., **110**(3), 153 (2005).

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

Neutron Measurements and the Weak Nucleon-Nucleon Interaction. Snow, W. M., **110**(3), 189 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Measurement of the Parity-Violating Neutron Spin Rotation in  ${}^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  ${}^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

A Gamma Polarimeter for Neutron Polarization Measurement in a Liquid Deuterium Target for Parity Violation in Polarized Neutron Capture on Deuterium. Komives, A., Sint, A. K., Bowers, M., Snow, M., **110**(3), 221 (2005).

Virtual Excitation and Multiple Scattering Correction Terms to the Neutron Index of Refraction for Hydrogen. Schoen, K., Snow, W. M., Kaiser, H., Werner, S. A., **110**(3), 259 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleć, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

### Sobolev, Y.

${}^3\text{He}$  Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

### Soldner, T.

The Beta-, Neutrino- and Proton-Asymmetry in Neutron  $\beta$ -Decay. Abele, H., Baeßler, S., Deissenroth, M., Glück, F., Krempel, J., Kreuz, M., Märkisch, B., Mund, D., Schumann, M., Soldner, T., **110**(4), 377 (2005).

### Solovei, V.

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebroy, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

Search for Radiative  $\beta$ -Decay of the Free Neutron. Byrne, J., Khafizov, R. U., Mostovoi, Y. A., Rozhnov, O., Solovei, V., Beck, M., Kozlov, V. U., Severijns, N., **110**(4), 415 (2005).

### Steiner, R.

Details of the 1998 Watt Balance Experiment Determining the Planck Constant. Steiner, R., Newell, D., Williams, E., **110**(1), 1 (2005).

### Stephan, E.

Search for Time Reversal Violating Effects:  $R$ -Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebroy, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### Stephenson, S. L.

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**Steyerl, A.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

**Straumann, U.**

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

**Strelkov, A.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

**Strelkov, A. V.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**Strobl, M.**

SUSANS With Polarized Neutrons. Wagh, A. G., Rakhecha, V. C., Strobl, M., Treimer, W., **110**(3), 231 (2005).

**Stutzman, P.**

Developing a More Rapid Test to Assess Sulfate Resistance of Hydraulic Cements. Ferraris, C., Stutzman, P., Peltz, M., Winpigler, J., **110**(5), 529 (2005).

**Swanson, H. E.**

Measurement of the Parity-Violating Neutron Spin Rotation in  $^4\text{He}$ . Bass, C. D., Dawkins, J. M., Luo, D., Micherdzinska, A., Sarsour, M., Snow, W. M., Mumm, H. P., Nico, J. S., Huffman, P. R., Markoff, D. M., Heckel, B. R., Swanson, H. E., **110**(3), 205 (2005).

**Szelc, A.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szelc, A., Tanner, L., **110**(3), 173 (2005).

**T**

**Tal'daev, R.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

**Tanaka, T.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Tanner, L.**

Magnetic Field Stabilization for Magnetically Shielded Volumes by External Field Coils. Brys, T., Czekaj, S., Daum, M., Fierlinger, P., George, D., Henneck, R., Hochman, Z., Kasprzak, M., Kohlik, K., Kirch, K., Kuzniak, M., Kuehne, G., Pichlmaier, A., Siodmok, A., Szelc, A., Tanner, L., **110**(3), 173 (2005).

**Thompson, A. K.**

The Fundamental Neutron Physics Facilities at NIST. Nico, J. S., Arif, M., Dewey, M. S., Gentile, T. R., Gilliam, D. M., Huffman, P. R., Jacobson, D. L., Thompson, A. K., **110**(3), 137 (2005).

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerzolimsky, B. G., **110**(4), 401 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “*a*”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

**Toman, B.**

Bayesian Approach to Assessing Uncertainty and Calculating a Reference Value in Key Comparison Experiments. Toman, B., **110**(6), 605 (2005).

**Tornow, W.**

Direct nn-Scattering Measurement With the Pulsed Reactor YAGUAR. Mitchell, G. E., Furman, W. I., Lychagin, E. V., Muzichka, A. Y., Nekhaev, G. V., Strelkov, A. V., Sharapov, E. I., Shvetsov, V. N., Chernuhin, Y. I., Levakov, B. G., Litvin, V. I., Lyzhin, A. E., Magda, E. P., Crawford, B. E., Stephenson, S. L., Howell, C. R., Tornow, W., **110**(3), 225 (2005).

**Treimer, W.**

SUSANS With Polarized Neutrons. Wagh, A. G., Rakhecha, V. C., Strobl, M., Treimer, W., **110**(3), 231 (2005).

**Trinks, U.**

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmiedl, E., Hartman, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Trull, C.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerzolimsky, B. G., **110**(4), 401 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of “*a*”. Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

**U**

**Utsuro, M.**

Observation on the Visibility Decrease in a VCN Spin Resonator Interferometry. Utsuro, M., Hino, M., Geltenbort, P., Butterworth, J., **110**(3), 245 (2005).

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch,

K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

V

**van den Brandt, B.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Van Gestel, J.**

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

**Varlamov, A. V.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1-2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

**Vasiliev, A.**

Superconducting UCN Polarizer for a New EDM Spectrometer. Serebrov, A., Lasakov, M., Fomin, A., Geltenbort, P., Murashkin, A., Krasnoshekova, I., Rudnev, Y., Vasiliev, A., **110**(3), 185 (2005).

A Silicon UCN Detector With Large Area and With Analysis of UCN Polarization. Lasakov, M., Serebrov, A., Khusainov, A., Pustovoit, A., Borisov, Y., Fomin, A., Geltenbort, P., Kon'kov, O., Kotina, I., Shablii, A., Solovei, V., Vasiliev, A., **110**(3), 289 (2005).

**Vassiljev, A.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

**Veronin, A. Y.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

**Vogelaar, R. B.**

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

**Vogt, R. F.**

Quantitating Fluorescence Intensity From Fluorophore: Assignment of MESF Values. Gaigalas, A. K., Wang, L., Schwartz, A., Marti, G. E., Vogt, R. F., **110**(2), 101 (2005).

**W**

**Wagh, A. G.**

SUSANS With Polarized Neutrons. Wagh, A. G., Rakhecha, V. C., Strobl, M., Treimer, W., **110**(3), 231 (2005).

High-Precision Determination of the Neutron Coherent Scattering Length. Wagh, A. G., Abbas, S., **110**(3), 237 (2005).

**Walker, T. G.**

Polarized  $^3\text{He}$  Spin Filters for Slow Neutron Physics. Gentile, T. R., Chen, W. C., Jones, G. L., Babcock, E., Walker, T. G., **110**(3), 299 (2005).

**Wang, L.**

Quantitating Fluorescence Intensity From Fluorophore: Asnment of MESF Values. Gaigalas, A. K., Marti, G. E., Vogt, R. F., Schwartz, A., Wang, L., **110**(2), 101(2005).

**Weis, A.**

Design and Performance of Laser-Pumped Cs-Magnetometers for the Planned UCN EDM Experiment at PSI. Groeger, S., Bison, G., Weis, A., **110**(3), 179 (2005).

**Wermelinger, C.**

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier,

A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

**Werner, S. A.**

Virtual Excitation and Multiple Scattering Correction Terms to the Neutron Index of Refraction for Hydrogen. Schoen, K., Snow, W. M., Kaiser, H., Werner, S. A., **110**(3), 259 (2005).

**Westphal, A.**

Investigation of the Neutron Quantum States in the Earth's Gravitational Field. Nesvizhevsky, V. V., Petukhov, A. K., Börner, H. G., Baranova, T. A., Gagarski, A. M., Petrov, G. A., Protasov, K. V., Veronin, A. Y., Baeßler, S., Abele, H., Westphal, A., Lucovac, L., **110**(3), 263 (2005).

**Wietfeldt, F. E.**

A New Method for Precision Cold Neutron Polarimetry Using a  $^3\text{He}$  Spin Filter. Wietfeldt, F. E., Gentile, T. R., **110**(3), 305 (2005).

Measurement of the Neutron Lifetime by Counting Trapped Protons. Wietfeldt, F. E., Dewey, M. S., Gilliam, D. M., Nico, J. S., Fei, X., Snow, W. M., Greene, G. L., Pauwels, J., Eykens, R., Lamberty, A., Van Gestel, J., **110**(4), 327 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

Detecting the Radiative Decay Mode of the Neutron. Fisher, B. M., Wietfeldt, F. E., Dewey, M. S., Gentile, T. R., Nico, J. S., Thompson, A. K., Coakley, K. J., Beise, E. J., Kiriluk, K. G., Byrne, J., **110**(4), 421 (2005).

A Backscatter Suppressed Electron Detector for the Measurement of " $a$ ". Komives, A., Wietfeldt, F. E., Trull, C., Bateman, F. B., Dewey, M. S., Thompson, A. K., Anderman, R., Balashov, S., Mostovoy, Y., **110**(4), 431 (2005).

**Wilburn, W. S.**

New Pulsed Cold Neutron Beam Line for Fundamental Nuclear Physics at LANSCE. Seo, P.-N., Bowman, J. D., Gericke, M., Gillis, R. C., Greene, G. L., Leuschner, M. B., Long, J., Mahurin, R., Mitchell, G. S., Penttila, S. I., Peralta, G., Sharapov, E. I., Wilburn, W. S., **110**(3), 145 (2005).

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005),

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O'Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleček, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

Detector Development for the abBA Experiment. Seo, P.-N., Bowman, J. D., Mitchell, G. S., Penttila, S. I., Wilburn, W. S., **110**(4), 427 (2005).

**Williams, E.**

Details of the 1998 Watt Balance Experiment Determining the Planck Constant. Steiner, R., Newell, D., Williams, E., **110**(1), 1 (2005).

**Wilson, R.**

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S., Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

**Winpigler, J.**

Developing a More Rapid Test to Assess Sulfate Resistance of Hydraulic Cements. Ferraris, C., Stutzman, P., Peltz, M., Winpigler, J., **110**(5), 529 (2005).

**Wise, S. A.**

Preparation of Reference Material 8504, Transformer Oil. Poster, D. L., Schantz, M. M., Wise, S. A., **110**(6), 613 (2005).

**Wokaun, A.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryš, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuzniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).

**Wolf, M.**

<sup>3</sup>He Spin Filter for Neutrons. Batz, M., Baeßler, S., Heil, W., Otten, E. W., Rudersdorf, D., Schmiedeskamp, J., Sobolev, Y., Wolf, M., **110**(3), 293 (2005).

**Wong-Ng, W.**

Ba(OH)<sub>2</sub> Equilibria in the System Ba-O-H-F, With Application to the Formation of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6.5+x</sub> From BaF<sub>2</sub>-Precursors. Cook, L. P., Wong-Ng, W., Feenstra, R., **110**(2), 115 (2005).

**X**

**Xu, H. H. K.**

Chemistry of Silanes: Interfaces in Dental Polymers and Composites. Antonucci, J. M., Dickens, S. H., Fowler, B. O., Xu, H. H. K., McDonough, W. G., **110**(5), 541 (2005).

**Y**

**Yang, G. L.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

**Yang, L.**

Determination of the Neutron Lifetime Using Magnetically Trapped Neutrons. Dzhosyuk, S. N., Copete, A., Doyle, J. M., Yang, L., Coakley, K. J., Golub, R., Korobkina, E., Kreft, T., Lamoreaux, S. K., Thompson, A. K., Yang, G. L., Huffman, P. R., **110**(4), 339 (2005).

Chaotic Scattering and Escape Times of Marginally Trapped Ultracold Neutrons. Coakley, K. J., Doyle, J. M., Dzhosyuk, S. N., Yang, L., Huffman, P. R., **110**(4), 367 (2005).

**Yerozolimsky, B. G.**

Neutron Lifetime Experiment Based on an Accordion-Like UCN Storage Volume Coated With “Low Temperature Fomblin.” Yerozolimsky, B., Steyerl, A., Kwon, O., Luschikov, V., Strelkov, A., Geltenbort, P., Achiwa, N., Pichlmaier, A., Fierlinger, P., **110**(4), 351 (2005).

Proposed Measurement of the Beta-Neutrino Correlation in Neutron Decay. Collett, B., Anderman, R., Balashov, S., Bateman, F. B., Byrne, J., Dewey, M. S.,

Fisher, B. M., Goldin, L., Jones, G., Komives, A., Konopka, T., Leuschner, M., Mostovoy, Y., Nico, J. S., Thompson, A. K., Trull, C., Wietfeldt, F. E., Wilson, R., Yerozolimsky, B. G., **110**(4), 401 (2005).

**Yoshino, H.**

UCN Production With a Single Crystal of Ortho-Deuterium. Utsuro, M., Tanaka, M., Mishima, K., Nagai, Y., Shima, T., Fukuda, Y., Kohmoto, T., Momose, T., Moriai, A., Okumura, K., Yoshino, H., **110**(3), 273 (2005).

**Young, A.**

Measurement of the Loss and Depolarization Probability of UCN on Beryllium and Diamond Like Carbon Films. Brys, T., Daum, M., Fierlinger, P., Geltenbort, P., Gupta, M., Henneck, R., Heule, S., Kirch, K., Lasakov, M., Mammei, R., Makela, M., Pichlmaier, A., Serebrov, A., Straumann, U., Vogelaar, R. B., Wermelinger, C., Young, A., **110**(3), 279 (2005).

**Young, G. R.**

Measurement of Neutron Decay Parameters—The abBA Experiment. Wilburn, W. S., Bowman, J. D., Mitchell, G. S., O’Donnell, J. M., Penttila, S. I., Seo, P.-N., Calarco, J. R., Hersmann, F. W., Chupp, T. E., Cianciolo, T. V., Rykaczewski, K. P., Young, G. R., De Souza, R. T., Snow, W. M., Desai, D., Greene, G. L., Grzywacz, R. K., Frleč, E., Pocanic, D., Gentile, T. R., Gudkov, V., Jones, G. L., **110**(4), 389 (2005).

**Yuan, V.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabagyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on B<sub>4</sub>C and <sup>27</sup>Al. Gericke, M. T., Bowman, J. D., Carlini, R. D.,

Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### **Yue, A.**

Beamline Performance Simulations for the Fundamental Neutron Physics Beamline at the Spallation Neutron Source. Huffman, P. R., Greene, G. L., Allen, R. R., Cianciolo, V., Huerto, R. R., Koehler, P., Desai, D., Mahurin, R., Yue, A., Palmquist, G. R., Snow, W. M., **110**(3), 161 (2005).

## **Z**

### **Zannoni, A.**

On the Absorption Spectrum of Noble Gases at the Arc Spectrum Limit. Fano, U., Pupillo, G., Zannoni, A., Clark, C. W., **110**(6), 583 (2005).

### **Zejma, J.**

Search for Time Reversal Violating Effects: *R*-Correlation Measurement in Neutron Decay. Bodek, K., Ban, G., Beck, M., Bialek, A., Bryś, T., Czarnecki, A., Fettscher, W., Gorel, P., Kirch, K., Kistryn, S., Kozela, A., Kuźniak, M., Lindroth, A., Naviliat-Cuncic, O., Pulut, J., Serebrov, A., Severijns, N., Stephan, E., Zejma, J., **110**(4), 461 (2005).

### **Zhang, C.**

Radiative Neutron  $\beta$ -Decay in Effective Field Theory. Gardner, S., Bernard, V., Meißner, U. G., Zhang, C., **110**(4), 411 (2005).

### **Zherebtsov, O.**

Measurement of the Neutron Lifetime Using a Gravitational Trap and a Low-Temperature Fomblin

Coating. Serebrov, A., Varlamov, V., Kharitonov, A., Fomin, A., Pokotilovski, Y., Geltenbort, P., Butterworth, J., Krasnoschekova, I., Lasakov, M., Tal'daev, R., Vassiljev, A., Zherebtsov, O., **110**(4), 333 (2005).

Project of Neutron Beta-Decay *A*-Asymmetry Measurement With Relative Accuracy of  $(1\text{--}2) \times 10^{-3}$ . Serebrov, A., Rudnev, Y., Murashkin, A., Zherebtsov, O., Kharitonov, A., Korolev, V., Morozov, T., Fomin, A., Pusenkov, V., Schebetov, A., Varlamov, V., **110**(4), 383 (2005).

### **Zhu, H.**

Measurement of Parity Violation in np Capture: the NPDGamma Experiment. Page, S. A., Bowman, J. D., Carlini, R. D., Case, T., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Nann, H., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 195 (2005).

Commissioning of the NPDGamma Detector Array: Counting Statistics in Current Mode Operation and Parity Violation in the Capture of Cold Neutrons on  $\text{B}_4\text{C}$  and  $^{27}\text{Al}$ . Gericke, M. T., Bowman, J. D., Carlini, R. D., Chupp, T. E., Coulter, K. P., Dabaghyan, M., Desai, D., Freedman, S. J., Gentile, T. R., Gillis, R. C., Greene, G. L., Hersman, F. W., Ino, T., Ishimoto, S., Jones, G. L., Lauss, B., Leuschner, M. B., Losowski, B., Mahurin, R., Masuda, Y., Mitchell, G. S., Muto, S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Santra, S., Seo, P.-N., Sharapov, E. I., Smith, T. B., Snow, W. M., Wilburn, W. S., Yuan, V., Zhu, H., **110**(3), 215 (2005).

### **Zimmer, O.**

First Ever Storage of Ultracold Neutrons in a Magnetic Trap Made of Permanent Magnets. Ezhev, V. F., Andreev, A. Z., Glushkov, A. A., Glushkov, A. G., Groshev, M. N., Knyazkov, V. A., Krygin, G. B., Ryabov, V. L., Serebrov, A. P., Bazarov, B. A., Geltenbort, P., Hartman, F. J., Paul, S., Picker, R., Zimmer, O., Kovrizhnykh, N. A., **110**(4), 345 (2005).

A Superconducting Magnet UCN Trap for Precise Neutron Lifetime Measurements. Picker, R., Altarev, I., Bröcker, J., Gutsmiedl, E., Hartmann, J., Müller, A., Paul, S., Schott, W., Trinks, U., Zimmer, O., **110**(4), 357 (2005).

**Zmeskal, J.**

Investigation of Solid D<sub>2</sub> for UCN Sources. Atchinson, F., Bodek, K., van den Brandt, B., Bryš, T., Daum, M., Fierlinger, P., Geltenbort, P., Giersch, M., Hautle, P., Hino, M., Henneck, R., Kasprzak, M., Kirch, K., Kohlbrecher, J., Konter, J. A., Kühne, G., Kuźniak, M., Mishima, K., Pichlmaier, A., Ratz, D., Serebrov, A., Utsuro, M., Wokaun, A., Zmeskal, J., **110**(4), 491 (2005).