

## SMI: Publications 2006

### Peer reviewed

Atchison, F., B. Blau, M. Daum, P. Fierlinger, P. Geltenbort, R. Henneck, S. Heule, M. Kasprzak, K. Kirch, K. Kohlik, M. Kuzniak, M. Meier, C. F. Meyer, A. Pichlmaier, C. Plonka, P. Schmidt-Wellenburg, B. Schultrich, T. Stucky, V. Weihnacht and O. Zimmer, "Storage of ultracold neutrons in a volume coated with diamond-like carbon", *Physical Review C* 74, (5), 055501

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Bartalucci, S., S. Bertolucci, M. Bragadireanu, M. Cargnelli, M. Catitti, C. Curceanu, S. Di Matteo, J. P. Egger, C. Guaraldo, M. Iliescu, T. Ishiwatari, M. Laubenstein, J. Marton, E. Milotti, D. Pietreanu, T. Ponta, D. L. Sirghi, F. Sirghi, L. Sperandio, E. Widmann and J. Zmeskal, "New experimental limit on the Pauli exclusion principle violation by electrons", *Physics Letters B* 641, (1), 18-22 [Link](#)

Hori, M., A. Dax, J. Eades, K. Gomikawa, R. S. Hayano, N. Ono, W. Pirkl, E. Widmann, H. A. Torii, B. Juhasz, D. Barna and D. Horvath, "Determination of the antiproton-to-electron mass ratio by precision laser spectroscopy of pbar-He+", *Physical Review Letters* 96, (24), 243401 [Link](#)

Ishiwatari, T., G. Beer, A. M. Bragadireanu, M. Cargnelli, C. Curceanu, J. P. Egger, H. Fuhrmann, C. Guaraldo, M. Iliescu, K. Itahashi, M. Iwasaki, P. Kienle, B. Lauss, V. Lucherini, L. Ludhova, J. Marton, F. Mulhauser, T. Ponta, L. A. Schaller, D. L. Sirghi, F. Sirghi, P. Strasser and J. Zmeskal, "New analysis method for CCD X-ray data", *Nuclear Instruments & Methods in Physics Research Section a-Accelerators Spectrometers Detectors and Associated Equipment* 556, (2), 509-515

Ivanov, A. N., M. Faber, V. A. Ivanova, J. Marton and N. I. Troitskaya, "Estimate of the sigma((I=1))(KN)(0)-term value from the energy-level shift of kaonic hydrogen in the ground state", *Physical Review A* 73, (3), 032510

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Kienle, P., Y. Akaishi and T. Yamazaki, "Momentum correlation in the three-body decay of high-density K<sup>-</sup> nuclear clusters: NNNK<sup>-</sup> → N+N+A", *Physics Letters B* 632, (2-3), 187-191

Mulhauser, F., A. Adamczak, G. A. Beer, V. M. Bystritsky, M. Filipowicz, M. C. Fujiwara, T. M. Huber, O. Huot, R. Jacot-Guillarmod, P. Kammel, S. K. Kim, P. E. Knowles, A. R. Kunselman, G. M. Marshall, A. Olin, C. Petitjean, T. A. Porcelli, L. A. Schaller, V. A. Stolupin, J. Wozniak, J. Zmeskal and the TRIUMF Muon Hydrogen Collaboration, "Ramsauer-Townsend effect in muonic atom scattering", *Physical Review A* 73, (3), 034501

## **Conference Proceedings and longer articles without peer-review of professional journals**

Curceanu (Petrascu), C., A. Rusetsky and E. Widmann, "Exotic Atoms cast Light on Fundamental Questions", CERN Courier 46, (9), 32-34 [Link](#)

Currell, F. and E. Widmann, "Challenges for Atomic and Fundamental Physics with Highly Charged Ions and Antiprotons", Nuclear Physics News 16, (1), 24-28

Beller, P., B. Franzke, P. Kienle, R. Kruecken, I. Koop et al., "Antiproton-Ion Collider for FAIR Project", AIP Conference Proceedings 821, International Workshop on Beam Cooling and Related Topics, COOL05), 108-112

Bühler, P., M. Cargnelli, P. Kienle, J. Marton, E. Widmann et al., "AMADEUS at DAFNE 2", International Workshop Exotic hadronic atoms , Proceedings of the International Workshop Exotic hadronic atoms, deeply bound kaonic nuclear states and antihydrogen: present results, future challenges,

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Cargnelli, M., T. Ishiwatari, P. Kienle, J. Marton, E. Widmann et al., "New Precision Studies of Strong Interaction in Exotic Atoms: Kaonic Hydrogen and Deuterium", AIP Conference Proceedings 870, 9th Conference on the Intersections of Particle and Nuclear Physics CIPANP06, 475-477

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Ishiwatari, T., M. Sato and Widmann, E., "Experimental study of strange tribaryons in the  ${}^4\text{He}(\text{Kbar}, \text{p})$  reaction", AIP Conference Proceedings 842, PARTICLES AND NUCLEI: 17th International Conference on Particles and Nuclei, 480-482

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Marton, J. , "Exotic Atom Research Using Large Area Silicon Drift Detectors", International Symposium On Detector Development For Particle, Astroparticle And Synchrotron Radiation Experiments , SNIC 2006, [Link](#)

Okada, S., M. Cargnelli, T. Ishiwatari, B. Juhasz, P. Kienle et al., "Precise measurement of kaonic helium  $3d \rightarrow 2p$  x-rays", AIP Conference Proceedings 870, Conference on the Intersections of Particle and Nuclear Physics, 493-495