

PHYSICS

REFEREED PUBLICATIONS

- Fatuzzo, M. & Toepker, T.** (2004). More track and field. The Physics Teacher, 42, 30.
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- Fatuzzo, M.** & Melia, F. (2003). A kinship between the EGRET supernova remnants and Sagittarius A East. The Astrophysical Journal, 596, 1035-1043.
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- Schmitzer, H.**, Wagner, H.P., Dultz, W. & Kuehnelt, M. (2002). Phasematched third harmonic generation in mercury-(I)-chloride. Applied Optics, 41, 470-4.
- Siebert, K.J., **Schmitzer, H.** & Dultz, W. (2002). Measurement of the helicity of photon pairs using the optical Berry phase. Physics Letters A, 300(4-5), 341-7.
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- Arjmandi, S., Brinkman, J. & **Toepker, T.P.** (2003). Physical push-ups. The Physics Teacher, 41(6), 323-324.

PRESENTATIONS AT ACADEMIC CONFERENCES

Fatuzzo, M. (2004). A kinship between Sgr A East and the EGRET SNR's. Paper presented at the Physics Department Colloquium, Northern Kentucky University, Highland Heights, KY.

Fatuzzo, M. & Adams, F.C. (2002). Enhancement of ambipolar diffusion rates through field fluctuations. Paper presented at the American Astronomical Society, Albuquerque, NM.

Herbert, S.T. & Hinton, M. (2004). Square orbits. Paper presented at the American Association of Physics Teachers, Albuquerque, NM.

Schuster, A., **Herbert, S.T. & Toepker, T.** (2002). Infrared. fiber optic, Michelson interferometer using LabView. Paper presented at the American Association of Physics Teachers, Philadelphia, PA.

Frankenhoff, M. & **Herbert, S.T.** (2001). Using LabView to collect electrical transport data on superconductors. Paper presented at the American Association of Physics Teachers, San Diego, CA.

Witting, J., Link, J., Frankenhoff, M. & **Herbert, S.T.** (2001). Fabrication and measurement of Josephson junction arrays. Paper presented at the American Association of Physics Teachers, San Diego, CA.

Toepker, T. (2004). Conservation. motion. energy. Paper presented at Workshop for Cincinnati Public Schools, Mayerson Center, Cincinnati, OH.

OTHER

Herbert, S.T. (2004). Manatee acoustical responses to generated frequencies in the audible range and associated avoidance behaviors. Poster presentation at the Ohio Fish and Wildlife Service Conference, Fawcett Center, Ohio State University, Columbus, OH.

Herbert, S.T. (2002). Finite-size (i.e. real) samples and the two-dimensional superconducting transition. Invited talk presented to the Miami University physics department, Miami, OH.

Schmitzer, H. (2004). Light with a twist. Invited talk. Colloquium at the Northern Kentucky University, Highland Heights, KY.

Schmitzer, H. (2004). The angular momentum of light. Invited talk. Colloquium at the University of Cincinnati, Cincinnati, OH.

Schmitzer, H. & Dultz, W. (2004). The angular momentum transfer from light to birefringent particles modeled on the Poincaré sphere. Seminar talk at the Optical Science Center in Tucson, Tucson, AZ.

Toepker, T. (2004). Nuclear fuel cycle. Presentation at Mount Notre Dame High School, Cincinnati, OH.

PROCEEDINGS

Schmitzer, H. (2004). Angular velocity oscillations of birefringent platelets from spin angular momentum transfer of photon flux. Proceedings of the International Conference of the Sciences in Waikiki, Waikiki, HI.

Schmitzer, H. (2004). Applications for small pinholes in polarisation-and quantum optics. Proceedings to the Spring Meeting of the German Society of Applied Optics.

Schmitzer, H. (2004). Optically controlled rotation of PTCDA crystals in optical tweezers. Proceedings of the International Conference on the Physics of Semiconductors in Flagstaff, Flagstaff, AZ.