Experimental researches at CASPER's HIDEPL (Hydrometeorology Impact and Dusty Plasmas Laboratory) have reached an important milestone in their efforts to study dusty plasmas: the first crystal has been seen in the GEC Reference cell. When asked the question of seeing crystalized crystals, Dr. Lorin Moodenbah of the University of Alaska, Department of Physics, said, “Seeing crystals in the lab means that we can now get down to work! We were especially happy to see that the first thing we had theorized should occur (particles with a size distribution forming being a liquid as a liquid), did occur.” And an Ph.D. student Bernnie Smith says, “It’s gratifying to know that we haven’t been spinning our wheels for the last two years for nothing.”

Recent CASPER Publications

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Coulomb Crystals Detected at Hypervelocity Impacts and Dusty Plasmas Laboratory

Quantum Optics Initiative
Principal Investigator Proposal Investigation, Technical, and Management Plan Submitted in Response to a Request from the Office of Naval Research (November, 2002) • FUNDED •

Coulomb Crystals Detected at Hypervelocity Impacts and Dusty Plasmas Laboratory

Penrose Delivers Campus Lecture on Quantum Mechanics

Sir Roger Penrose delivered a campus lecture on “Why We Need an Improved Quantum Mechanics” on Sept. 30 in the Cashion fifth floor conference room. Sir Roger Penrose is the Emeritus Rouse Ball Professor of Mathematics at the University of Oxford and Francis and Mihoko T. Takagi University Professor of Physics and Mathematics, Pennsylvania State University, USA. He has received a number of prizes and awards including the 1989 Nobel Prize for Physics, the 1988 Albert Einstein Award and the 1987 Dirac Medal for Fundamental Physics. For his understanding of the unifying theories, the

Margaret (Peggy) Shea Gives Lecture on Space Weather and Archaeology

Peggy Shea recently presented a joint CASPER/Physics Seminar at the University of Alabama. Her seminar was titled “Dr. Peggy Shea recently presented a joint CASPER/Physics Seminar on her research in cosmic radiation and solar terrestrial phenomena. Peggy Shea was awarded the Waldo E. Smith Medal and the Edward C. Dean Medal for her work in experimental physics. She was especially happy to see that the first thing she had theorized should occur (particles with a size distribution forming being a liquid as a liquid), did occur.” And an Ph.D. student Bernnie Smith says, “It’s gratifying to know that we haven’t been spinning our wheels for the last two years for nothing.”

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Dr. Roger Penrose was knighted for his outstanding contributions to mathematics.