

Four Corners Section Fall Meeting 2006

October 6 - 7
Utah State University
Logan, Utah

The annual Four Corners Section Fall Meeting of the APS was held at the Eccles Conference Center on the campus of Utah State University on Friday and Saturday, October 6 and 7. The meeting was held jointly with a Zone 15 Society of Physics Students meeting. In all there were 150 contributed and invited presentations and a total of 222 people registered for the conference.

The meeting opened on Friday morning with an invited plenary session, Physics in the Four Corners Region I, that featured talks with an applied-physics bent by Stan Solomon of the National Center for Atmospheric Research, Neal Shinn of Sandia National Laboratories and the DOE Center for Integrated Nanotechnologies, and John Turner of the National Renewable Energy Laboratory. Following the invited session were two sets of mostly contributed parallel sessions. One of the parallel sessions was a Symposium on Computational Physics with invited talks by Tanmoy Bhattacharya of Los Alamos National Laboratory, John Cary of Tech X Corporation and the University of Colorado, and Steve Plimpton of Sandia National Laboratories. In another parallel session Bruce Doak of Arizona State University gave an invited presentation on a novel technique for making diffraction measurements of proteins suspended in microdroplets. The afternoon included a second invited session, Physics in the Four Corners Region II. That session, which focused on condensed matter and molecular physics, included talks by Brian LeRoy of the University of Arizona, Heather Lewandowski of JILA and the University of Colorado, and Dieter Hochheimer of Colorado State University. The afternoon concluded with a contributed poster session, which had a total of 40 posters. Friday evening featured a reception and a banquet, followed by a keynote talk by Mary Cleave of NASA, who spoke on NASA's Science Missions. Dr. Cleave holds MS and PhD degrees from Utah State University and is a former astronaut in the Space Shuttle Program.

The program on Saturday opened with five parallel sessions. The session entitled Nanoscale Physics included an invited talk by Jordan Gerton of the University of Utah on nanoscale imaging of biological systems. The parallel sessions were followed by the last invited session, which focused on gravitational and high-energy physics. Charles Torre of Utah State University opened the Session with a talk on the state of Gravitational Physics, followed by Scott Thomas of Rutgers University who spoke about Gravitational Holography. The conference closed with a keynote address, "The Quantum Universe," by Hitoshi Murayama of the University of California, Berkeley, an overview on the entwined states of high-energy physics and cosmology."

The SPS Zone 15 meeting was an integral part of the Four Corners Meeting. On Thursday SPS provided pizza to early registrants and well as tours of the USU physics labs. SPS participation was highlighted by invited-speaker introductions by SPS students and an SPS

sponsored luncheon for all conference participants on Friday. Gary White, the National SPS Director, gave a presentation during the SPS luncheon entitled "The Secret Lives of Physicists – from Spandex to Spintronics."

A traditional part of the annual Four Corners meetings is the student competition for the best talks and posters. In total, 102 student presentations were judged, with 12 awards given for outstanding presentations. The undergraduate winners at this years meeting were Jay Mathews (Colorado State University), Keith Warnick (Utah State University), Jan Marie Andersen (Utah State University), Joseph Smidt (Brigham Young University), Matthew Harrison (Brigham Young University), and Brady Cox (Brigham Young University). The graduate-student winners were Ryan Hoffmann (Utah State University), Hema Karnam, (Utah State University), Ana Kanevce (Colorado State University), Shahid Qamar (Arizona State University), Nicole Brimhall (Brigham Young University), and Michael Addae-Kagyah (Utah State University).

The Four-Corners Section of the APS is grateful to the sponsors of this joint meeting, including the Society of Physics Students, the Utah State University Department of Physics and College of Science, and the Space Dynamics Laboratory. The financial assistance to Four Corners students attending this meeting was made possible by Sandia National Laboratories, Los Alamos National Laboratory, and the National Renewable Energy Laboratory.