Science Café

At The Southeast Conference for Undergraduate Women in Physics Friday, January 18th, 8:10pm Pegasus Ballroom, UCF Student Union



Dr. Ashley Espy Kehoe

Dr. Ashley Espy received her Master's and Ph.D in Astronomy from the University of Florida and her B.S in Physics from the Georgia Institute of Technology. She is currently a Postdoctoral Research Associate in the Physics department at the University of Central Florida. Her work is focused on the dynamics of small bodies and dust in planetary systems. In particular she is interested in the orbital evolution of the dust injected into a system following a small body collision and the role of such events in exo-zodiacal clouds.



Dr. Josh Colwell

Dr. Colwell got his Ph.D. from the Department of Astrophysical, Planetary, and Atmospheric Sciences at the University of Colorado in 1989 and remained in Colorado as a Research Associate at the Laboratory for Atmospheric and Space Physics until 2006. He spent a year at the Observatoire Midi-Pyrenees in Toulouse, France, as a Fulbright Senior Research Scholar in 1995-1996. He is a member of the science team on the Cassini mission to Saturn, and he has flown experiments on the space shuttle and the NASA "Weightless Wonder" airplane. In June 2006 Dr. Colwell joined the UCF Physics Department's Planetary Science group.



Dr. Talat Rahman

Talat Rahman is a Pegasus Professor and Chair of Physics Department at University of Central Florida. Her research interests focus in computational designing of functional nanomaterials through microscopic understanding of their chemical, magnetic, optical and other novel properties. Her work also engages multiscale modeling for the simulation of epitaxial growth and surface morphological evolution. She is known for her ability to collaborate with experimentalists and does so with some of the leading groups worldwide. She grew up in Bangladesh and Pakistan and received her PhD from University of Rochester.



Dr. Beatriz Roldan Cuenva

Beatriz obtained her Ph.D. in Solid State Physics at Gerhard-Mercator Universität, in Duisburg, Germany. She joined the University of Central Florida in January 2004 and was promoted to Associate Professor in 2008 and to Professor in 2012. She investigates structural, electronic, magnetic, vibrational, and chemical properties of size- and shape-selected nanostructures. These fundamental physical properties are of great importance to many applications of nanotechnology, including giant magnetoresistance spin valves, magnetic tunnel junctions, single electron transistors, molecular electronic devices, thermoelectric devices, and catalytic systems for energy generation and environmental remediation.



Dr. Humberto Campins

After a two-year postdoctoral appointment at the University of Maryland, Dr. Campins spent nearly five years at the Planetary Science Institute in Tucson. In 1989, he accepted an assistant professorship at the University of Florida, were he attained the rank of Professor in 1997. From 1998 to 2002, Dr. Campins worked as Program Officer at the Research Corporation and as adjunct faculty at the Lunar and Planetary Laboratory of the University of Arizona in Tucson. In August 2002, Dr. Campins joined the UCF faculty as Provost Research Professor of Physics and Astronomy and head of the Planetary and Space Science Group. Dr. Campins' research area is astronomy. He studies comets, asteroids and other small bodies in the solar system

using a variety of ground based, airborne and space based telescopes. One of his current interests is the role that comets may have played in the origin of water and organic molecules on Earth and Mars.



Dr. Susan Blessing

Susan Blessing earned her Ph.D. in experimental particle physics from Indiana University and did a postdoc at Northwestern University before becoming a professor at Florida State University. For much of her research career, she focused on searching for new phenomena that she never found (glueballs, top squarks, leptoquarks, ...) and has now moved into doing actual measurements in electroweak physics. Since being at the university, she has developed an unexpectedly deep interest in undergraduate education - in physics and in general.



Dr. Zenghu Chang

Zenghu Chang is a Distinguished Professor of Physics and Optics, currently working in the area of attosecond optics and physics. After receiving a doctorate at the Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, in 1988, he served as an associate professor at this institution for the next three years before visiting the Rutherford Appleton Laboratory in the UK. Dr. Chang moved to the US in 1995. He conducted research at the Center for Ultrafast Optical Science at the University of Michigan for more than five years. In 2001 he joined the faculty at Kansas State University. Chang joined the University of Central Florida in the fall of 2010.



Dr. Richard Klemm

After finishing a postdoctoral fellowship at Stanford, Richard Klemm went to Iowa State University as an assistant professor. Then, after receiving tenure, he went to Exxon Research and Engineering Co. in Annandale NJ, where he worked for several years. He then traveled to various institutions before coming to UCF. Dr. Klemm has worked on a variety of theoretical topics in condensed matter physics. Since the discovery of the high temperature superconductors, he has worked primarily in that field, and devised the experimental phase-sensitive test of orbital symmetry using the best grain boundary junctions, the c-axis twist experiment in Bi₂Sr₂CaCu₂O_{8+d}, the

results of which have subsequently been reproduced in other laboratories. Recently, he has focused upon the spin anisotropy effects in small single molecule magnets, studying dimers and tetramers, and has also worked on Bose-Einstein atomic condensates.