The 2017 Dr. and Mrs. Satti Paddi and Parvati Reddy Public Lecture

High-Temperature Superconductivity: The Dark Energy of Condensed Matter

Dr. Laura H. Greene
President of the American Physical Society
National High Magnetic Field Laboratory
Florida State University and the
Centre for Emergent Superconductivity

DATE: Friday, October 27, 2017
TIME: 7:00 PM
PLACE: IIC-2001

A reception will follow. Parking available in Lot 17.

ABSTRACT: Superconductivity is a fascinating quantum mechanical phenomenon, which at low temperatures allows transmission of electrical power with no loss, magnetic levitation, and other intriguing phenomena. Conventional superconductivity was discovered in 1911, but was not solved until 1957. High-temperature superconductivity, discovered in 1986, is only one family in the dozens of families of unconventional superconductors discovered in 1979 (the original theory dates back to 1952); which remain, surprisingly, unsolved. Including some demos, she will define what a superconductor is, what "solved" means, describe some of the bizarre behavior of electrons in unconventional superconductors, and the analogy in her title.

ALL ARE WELCOME!