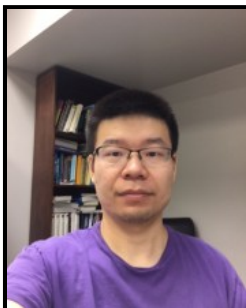


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Localization in Energy Materials**Yi Zhang, Louisiana State University**

PostDoc, Department of Physics & Astronomy and Center for Computation & Technology

Digital Media Center 1008B
May 28, 2019 - 10:30 am**Abstract:**

Anderson localization is not only interesting from a scientific point of view, but also has been proposed to play a critical role in materials that can be used for the harvesting and efficient use of energy. Combining two recently developed methods, the effective disorder Hamiltonian method and the typical medium dynamical cluster approximation, has opened the door to investigate localization in such energy materials with first principles simulations. In this talk, I will present our recent studies of localization in the diluted magnetic semiconductor Ga(Mn,N) and the intermediated-band photovoltaic Ti-doped Si.

Speaker's Bio:

Yi Zhang is currently in a postdoctoral position at Louisiana State University, Department of Physics and Astronomy. He received his Ph.D. in Physics from Boston College in 2014, and his BS in Physics from the University of Science and Technology of China. His collaborators include: Juana Moreno, Louisiana State University; Mark Jarrell, Louisiana State University; Tom Berlijn, Oak Ridge National Laboratory; Wei Ku, Shanghai Jiao Tong University; and N. S. Vidhyadhiraja, Jawaharlal Nehru.

