The Center for Inclusive Education presents:

RESEARCH CAFÉ

Wednesday, February 27, 2013 at 12:30pm

Center for Inclusive Education—2401 Computer Science Building
RSVP requested: CIE_GraduateSchool@stonybrook.edu
Lunch will be provided.
For a disability related accommodation, please call 2-1387.

Melvin Eloy Irizarry-Gelpí
Ph.D. candidate in the Department of Physics & Astronomy

The Secret Life of Interacting Quantum Particles

Synopsis: Some of the most ambitious experiments in the history of physics are currently taking place in particle colliders all over the world. In this talk I will present some of the theoretical tools that are used to describe interacting quantum particles during scattering experiments. We will see how pictures called Feynman diagrams can be used to keep track of the many ways a set of quantum particles can interact. Finally, I will discuss how certain simple approximations lead to interesting results.

Biography: Melvin was born in Ponce, Puerto Rico. He studied physics at the University of Puerto Rico at Mayagüez. As a research assistant at National Institute of Standards and Technology in Maryland, he fell in love with his future wife. After conducting research at SLAC National Accelerator Laboratory in California, he started his graduate studies in physics at Stony Brook as a Turner Fellow in the fall of 2006.