Prof. Howard Blair
Syracuse University

“Wanted Dead and Alive: Schrödinger’s Cat”

Abstract:
The relatively recent developments that exploit quantum phenomena for computing faster and communicating more securely have re-energized research into the basics of quantum phenomena and are forcing researchers to confront the problem of explaining how the world can actually be the way we observe it to be: The world is quantum mechanical.
The talk will present an overview of:
- Qubits (quantum bits)
- Quantum registers
- Quantum state transitions
and will review several well-known results that argue for the nonexistence of definite quantum states until a measurement is made. The talk will also sketch Abramsky’s simple imperative quantum programming language as a practical tool for prototyping code for quantum algorithms, with consequences for proving quantum programs correct and for algorithm complexity.

Friday, March 7, 2014
3:00 PM in 372 Jabara Hall

Please come join us for refreshments before the lecture at 2:30 p.m. in room 353 Jabara Hall.