

**CMP Seminar
Michigan State University**

**Andrew Jordan
University of Rochester**

The Quantum Road Most Taken

The concept of continuous quantum measurements will be discussed, based on a measurement device that continually gives information about a system it is interacting with. I will present a stochastic path integral approach to this physics, and gives examples of continuous wavefunction collapse by measuring one component of a pseudo-spin, and a continuous fluorescence measurement of a decaying two level system. I will also discuss comparisons of this work to recent experimental investigations, focusing on the most likely quantum path taken by the state between boundary conditions in time.

**Monday, Nov. 9, 2015
4:10 PM
BPS 1400
Prof. Mark Dykman - Host**