SIYE WU, Department of Mathematics, University of Colorado, Boulder Colorado 80309-0396, USA *Lattice polarization and projective flatness* 

Standard geometric quantization procedure requires choosing a real or complex polarization and the quantum physics is independent of the choice if there exists a projectively flat connection on the vector bundle of Hilbert spaces over the space of polarizations. In this talk, I will discuss a family of quantizations determined by lattices in a symplectic vector space and study the problem of projective flatness.