



GEOMETRY SEMINAR

Geometric Quantization of Kähler manifolds and the role of polarizations*

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Abstract

We will review aspects of geometric quantization with emphasis on the geometry and the physics roles of choosing a polarization. The dependence of the quantum theory on the choice of polarization leads naturally to the study of geodesics on the space of Kähler metrics and beyond it and to (attempting) to lift these geodesics to the quantum bundle and to the related coherent state transforms. Some recent applications of this formalism will be discussed.

**Work in collaboration with J.P. Nunes and T. Baier.*

Date: December 2, 2016 (Friday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU