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Title: Yang Mills for a deformed Heisenberg C^* Algebra

Abstract : In this talk, we discuss Yang-Mills theory for a deformed Heisenberg C^* algebra, the deformation quantization of Heisenberg manifold, $D_{\mu\nu}^{c,\hbar}$, using the noncommutative geometrical method developed by Alain Connes. In particular, I will describe Grassmannian connection and its curvature on a projective module over the noncommutative C^* algebra, $D_{\mu\nu}^{c,\hbar}$, and produce a specific element R in this projective module that determines both a non-trivial Rieffel projection and the curvature of the corresponding Grassmannian connection. Also, I will discuss a certain family of connections on the deformed Heisenberg C^* algebra that give critical points of the Yang-Mills functional, called solutions of Yang-Mills equation.