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"Dirac structures and deformation quantization"

Abstract:

Dirac structures were introduced (by Courant and Weinstein) as a common generalization of both Poisson structures and closed 2-forms. In the talk we shall notice that they also describe Hamiltonian families of Poisson structures (i.e. families that solve the Maurer-Cartan equation). These families are easily quantized via Kontsevich formality map. As an application, we'll get a quantization of twisted Poisson structures to non-commutative deformations of gerbes.