

A bridge in between Poisson Geometry and
Noncommutative Geometry through quantization
processes.

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Abstract

The Lie brackets concept considered over manifolds has enriched that one of a manifold largely and fruitfully, even generalizing Symplectic structures by giving place to Poisson structures, so called Poisson Geometry. In the other hand, the recent theory of Noncommutative Geometry is catching more attention as time pass from different fields of mathematics like Algebraic Geometry or Algebraic Topology. In this work, the main features of Poisson Geometry and Noncommutative Geometry are exposed. Then, both are linked through a quantization process, mainly, by deformation quantization.