Some aspects of deformation quantization

Pierre Bieliavsky

Universite Libre de Bruxelles, Brussels, Belgium

Thursday, May 17, 2001 102 Bradley Hall, 4:00 pm (Tea 3:30 pm Math Lounge)

Abstract

Deformation Quantization (star products theory) was introduced in the late seventies as an autonomous formulation of quantum mechanics within the framework of classical mechanics, namely Poisson geometry. It has been developed in many directions since then, and is closely related with a wide variety of different fields in mathematics and mathematical physics. I will give an introduction to this field together with some applications to geometry and topological deformation theory if time permits.