Poisson derivations of Poisson nilpotent algebras

Samuel Lopes

Samuel Lopes (slopes@fc.up.pt)
Universidade do Porto & CMUP

Abstract.

Poisson nilpotent algebras are an axiomatically defined class of Poisson algebras including Poisson affine spaces and semiclassical limits of many quantum algebras, including quantum matrices and quantum Schubert cell algebras. In this talk I will show that the first hochschild cohomology of these algebras is a free module of rank n over the Poisson center, generated by Eulerian derivations, where n is the rank of the maximal torus acting rationally on the Poisson algebra. This is joint work with S. Launois (U. Caen) and I. Oppong (U. Greenwich).