

Towards resolutions of singularities of Poisson structures

Ryszard Nest

Abstract:

E-symplectic manifolds include symplectic manifolds with boundary (or corners), b-symplectic manifolds, compactified cotangent bundles and regular symplectic foliations. But how general can such structures be? In this talk, I will explain how to associate an E-symplectic structure to a Poisson structure with transverse structure of semisimple type. Desingularization of these structures will also be discussed.

This should allow us to address a number of open questions in Poisson Geometry from a brand-new perspective.

This is joint work with Eva Miranda.