Peter Bouwknegt (Australian National University)
Leibniz algebroids and generalizations of geometry

Abstract

In recent years there has been a flurry of interest in so-called 'generalized geometry' – as formalized by Hitchin and his students – motivated by its applications in String Theory. At an algebraic level this kind of generalized geometry arises from exact Courant algebroids. In this talk I will review some aspects of generalized geometry and discuss even more general geometries, including what are known in the physics literature as 'exceptional generalized geometries' arising from certain (non-exact) Courant algebroids, and Leibniz algebroids.