

Marco Zambon : Reduction of Courant algebroids via graded manifolds.

Tuesday, July 4, 2023 3:15 PM (1 hour)

Courant algebroids are certain objects in Lie theory that are used to define, for instance, Dirac structures and generalized complex structures.

We will use the correspondence between degree 2 symplectic manifolds and Courant algebroids, due to Roytenberg, to approach the reduction of Courant algebroids using graded geometry. For this purpose we will consider both graded coisotropic submanifolds and a graded version of moment maps. The resulting reduction procedure, in a particular case, recovers the work of Bursztyn-Cavalcanti-Gualtieri around 2007. This talk is based on joint work with Bursztyn, Cattaneo and Metha.