Contributed Talk on September 24, 2024, 17:00 pm

Speaker: **Pedro Carvalho Silva, University of Hradec Králové**

Title: Homological reduction of Courant structures

Abstract:
Following Roytenberg-Severa, we know that Courant algebroids are in one-to-one correspondence with symplectic NQ-manifolds of degree two. On the other hand, more recently, it was observed by Bursztyn-Cattaneo-Mehta-Zambon that coisotropic reduction of a symplectic NQ-manifold of degree two relates to reduction of the corresponding Courant algebroid. In particular, from this perspective, the result by Bursztyn-Cavalcanti-Gualtieri on reduction of exact Courant algebroids can be derived from a degree two version of the Marsden-Weinstein reduction theorem. Based on these ideas, we will explain how to obtain a homological model for Bursztyn-Cavalcanti-Gualtieri Courant reduction. Our result can be seen as a Courant analog of the classical homological formulation of hamiltonian reduction of symplectic and Poisson manifolds due to Kostant-Sternberg and Stasheff.