Joint Seminar: DFT (IFIN-HH) & "Geometry&Physics@DFT" (IFIN-HH) (Geometry&Physics Homepage) (DFT Seminars webpage)

Date: Thursday, March 30, 2023, 12:00 noon

Speaker: Prof. Stefan Berceanu (IFIN-HH, Dept. of Theoretical Physics)

Title: Hamiltonian systems on almost cosymplectic manifolds

Abstract: We determine the Hamiltonian vector field on an odd dimensional manifold endowed with almost cosymplectic structure. This is a generalization of the corresponding Hamiltonian vector field on manifolds with almost transitive contact structures, which extends the contact Hamiltonian systems. Applications are presented to the equations of motion on a particular five-dimensional manifold, the extended Siegel-Jacobi upper-half plane, endowed with a generalized transitive almost contact structure and cosymplectic structure.