Seminar: "Geometry&Physics@DFT"

Location: seminar room DFT (IFIN-HH),
http://events.theory.nipne.ro/gap/index.php/seminar

Date: Friday June 7, 12 am

Title: **Quantum mechanics and geometry on Siegel-Jacobi spaces**

Speaker: **Stefan BERCEANU**

Abstract: The Jacobi group is the semidirect product of the real symplectic group with appropiate Heisenberg group. The Sigel-Jacobi domains are homogenous Kähler manifolds attached to the Jacobi groups. We have introduced generalized coherent states based on the the Siegel-Jacobi manifolds. Using a holomorphic representation of the Jacobi algebra by first order differential operators, we describe the dyamics of a process generated by a linear Hamiltonian in the generators of the Jacobi group. The Berezin kernel, Calabi's diastasis, the Kobayashi embedding, and the Cauchy formula for the Sigel-Jacobi disk are presented.