Seminar: "Geometry&Physics@DFT" (http://events.theory.nipne.ro/gap/index.php/seminar) (http://www.nipne.ro/indico/categoryDisplay.py?categId=16)

Location: seminar room DFT (IFIN-HH),

Date: Friday, 21 March 2014, 11:00 am

Title:Generalized Berezin quantization of almost Kaehler Cartan geometry and nonholonomic Ricci solitons and Einstein spaces

Speaker: Prof. Sergiu Vacaru (UAIC and CERN)

Abstract: "The Ricci soliton and modified Einstein equations can be formulated equivalently in nonholonomic almost symplectic variables. The corresponding geometric models are with almost Kaehler - Cartan connections which are different from the well known Levi-Civita and Chern connections. Such values are related via distortions, all completely defined by a corresponding metric / almost symplectic structure encoding information on stationary points in geometric evolutions and modified gravity theories. The first goal of this work is to formulate an approach to the geometry of nonholonomic complex manifolds endowed both with standard complex structures and induced by nonholonomic distributions almost Kaehler - Cartan geometric objects. The second goal is to elaborate a new framework for quantizing Ricci soliton and modified gravity models by generalizing the Berezin and Berezin-Toeplitz quantization for nonholonomic real and complex manifolds. Finally, we study a few explicit examples of quantum almost Kaehler - Ricci solitons and generic off-diagonal Einstein metrics."