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, 14 March 2014, 11:00 AM

Title: Toward Cosmological Inflation from Gauge/Gravity Duality

Speaker: **Dr. Lilia Anguelova** (INRNE, Bulgarian Academy of Sciences)

Abstract: "Recent Planck satellite data severely restrict the Cosmological Inflation models that are consistent with observation. Interestingly, it turns out that the class of models that is strongly favored by the data, is not preferred by the Inflationary paradigm itself. This was recently called an unlikeliness problem by Steinhardt et al.. The considerations leading to those conclusions are, however, all within the framework of standard weakly coupled field-theoretic Inflationary models. It is therefore particularly interesting to explore whether a whole new class of models, that arise from gravitational backgrounds found in the context of the gauge/gravity duality, can avoid such an unlikeliness problem. I will describe an Inflationary model within this class. I will also argue that it may have interesting predictions about primordial gravitational waves."