

*Seminar:* "Geometry&Physics", DFT (IFIN-HH)  
([Seminar Homepage](#)) ([Indico Page](#))

*Location:* DFT seminar room, IFIN-HH, Magurele

*Date:* Tuesday, May 15, 2018, 12:00 noon

*Title:* **Systematics of Constant Roll Inflation**

*Speaker:* **Prof. Lilia Anguelova** (INRNE, Sofia)

*Abstract:* "I will discuss constant roll inflation. This is a regime, in which the slow roll approximation can be violated. It has long been thought that this approximation is necessary for agreement with observations. However, recently it was understood that there can be inflationary models with a constant, and not necessarily small, rate of roll that are both stable and compatible with the observational constraints. I will describe a systematic investigation of the condition for such a constant-roll regime. This enables us to find a whole new class of inflationary models of this type. I will show that the new models are stable under scalar perturbations and that, in a part of their parameter space, they produce a nearly scale-invariant scalar power spectrum, as needed for agreement with observations."