Seminar: "Geometry&Physics@DFT"

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

Date: Friday May 31, 12 am

Title: **Large N expansion of tensor models**

Speaker: **Adrian TANASA**

Abstract: Tensor models, seen as quantum field theoretical models, represent a natural generalization of the celebrated matrix models. One of the main results of matrix model study is the fact the perturbative series can be reorganized in powers of $1/N$ (N being the matrix size) and leads to a leading order consisting in planar graphs (paving the two-dimensional sphere S^2). In this talk I will present a recent $1/N$ expansion of some particular class of tensor models in three dimensions (N being the size of the tensor). I will also show that the leading sector for this expansion is given by a certain class of tensor graphs which corresponds to particular triangularizations of the 3-dimensional sphere S^3.
based on arXiv:1301.1535[hep-th], "The 1/N expansion of multi-orientable random tensor models", S. Dartois, V. Rivasseau, A. Tanasa, Annales Henri Poincare (in press)