SEMPARIS – Séminaires en région parisienne

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Seminar of the theory group of APC

Mardi 30 Janvier 2018, 14:00

APC, 483 A - Malevitch Domaines : hep-th

Titre: Invitation to Random Tensors

Orateur : Razvan Gurau (CPHT - Ecole Polytechnique)

Résumé: Random matrices are ubiquitous in modern theoretical physics and provide insights on a wealth of phenomena, from the spectra of heavy nuclei to the theory of strong interactions or random two dimensional surfaces. The backbone of all the analytical results in matrix models is their 1/N expansion (where N is the size of the matrix). Despite early attempts in the '90, the generalization of this 1/N expansion to higher dimensional random tensor models has proven very challenging. This changed with the discovery of the 1/N expansion (originally for colored and subsequently for arbitrary invariant) tensor models in 2010. I this talk I will present a short introduction to the modern theory of random tensors and its connections to conformal field theory and random higher dimensional random geometry.