

20ème conférence Claude Itzykson - Random Surfaces and Random Geometry



ID de Contribution: 0

Type: **Invited talk**

Random Tensors

jeudi 11 juin 2015 15:15 (45 minutes)

Random tensors generalize random matrices and group field theory. Their Feynman perturbative expansion sums over all manifolds and a restricted class of quasi-manifolds, hence may be used to probe random geometries in higher dimensions. We shall review the $1/N$ expansion of random tensors. It is indexed by a new parameter (Gurau's degree) which is not a topological invariant of the underlying manifold, hence suggests new questions in enumerative combinatorics. Finally we shall discuss briefly the associated class of non-local tensor quantum field theories which generalize non-commutative field theories.

Auteur principal: RIVASSEAU, Vincent (LPT, Université Paris-Sud)

Orateur: RIVASSEAU, Vincent (LPT, Université Paris-Sud)