## Séminaire de Probabilités et Statistique

## Mardi 3 octobre à 14h00

Salle de conférences

## Anna Paola Todino

Università del Piemonte Orientale

Spherical Poisson Waves

In this talk we discuss the universality of Gaussian behaviour for spherical Laplace eigenfunctions introducing a model of Poisson random waves in  $S^2$ . We study Quantitative Central Limit Theorems when both the rate of the Poisson process and the energy of the waves diverge to infinity. We consider finite-dimensional distributions, harmonic coefficients and convergence in law in functional spaces, and we investigate carefully the interplay between the rates of divergence of eigenvalues and Poisson governing measures.

The talk is based on a joint work with Solesne Bourguin, Claudio Durastanti and Domenico Marinucci.