

SAMOS, UNIVERSITÉ DE PANTHÉON-SORBONNE PARIS 1

Matinée de CALCUL STOCHASTIQUE

VENDREDI 17 JUIN, 2005

72, rue RÉGNAULT, 7ème étage

PARIS 13ème, métro: Porte d'Ivry

10h-10h50 **ISTVAN GYONGY** (EDINBURGH UNIVERSITY, Grande Bretagne)

Titre: **Wong-Zakai approximations. Rate of convergence**

Résumé: We investigate the rate of convergence of the Wong-Zakai approximations, obtained by approximating the multi-dimensional driving process W of the SDE with continuous processes W_n of finite variation on a finite interval $[0, T]$. Our main result reads as follows. Suppose that W_n and its 'area processes' converge almost surely in the supremum norm to W and its area processes, respectively, with some given speed. Then the solutions of the approximating equations converge also almost surely in the supremum norm with essentially the same speed. This result is obtained in a joint paper with Anton Shmatkov.

11-11h50 **FREDERI VIENS** (PURDUE UNIVERSITY, États Unis)

Titre: **Estimées précises d'exposants de Lyapunov pour le modèle d'Anderson continu.**

Résumé: We give the sharpest estimates to date for the large-time exponential behavior of the stochastic Anderson model in continuous space. Our analysis is based on a general almost-sure result obtained by Malliavin differentiation and sub-Gaussian estimates, as well as on a detailed analysis of the expected logarithm of the Anderson model. Our results form the latest installment in a series of works begun nearly 15 years ago. We have come to the point where we believe the above two ingredients are the most appropriate for the study of almost-sure Lyapunov exponents for Anderson models, and that these ingredients are essentially disjoint.

12h10 -13h **GIOVANNI PECCATI** (UNIVERSITÉ de PARIS 6, France),

Titre: **Intégration de Skorohod basée sur la notion de dépendance faible**

Résumé: Dans cet exposé, on présentera différentes notions d'intégrale stochastique basée sur la décomposition chaotique sur l'espace de Wiener, dite *d'espace-temps*.