

« Uncertainty quantification and ensemble-based methods for geosciences »

Paris, January 31st 2014

Organisers : Sophie Ricci and Vivien Mallet

Seminar proposed by the MANU group (Méthodes mAthématiques et NUMériques) of LEFE program at INSU (http://www-ljk.imag.fr/LEFE_MANU/)

The seminar will take place in the center of Paris from 9h30 am to 5 pm, at

École normale supérieure
45, rue d'Ulm / 29, rue d'Ulm / 24 rue Lhomond
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Introductory talks on uncertainty methods and ensemble-based methods as well as applicative talks for geosciences will be given. Volunteers are welcome to give short talks on their work, and the floor will be open for discussion. The registration is free but necessary for organization purposes. Please send an email to sem.uq.lefemanu@cerfacs.fr for registration and indicate if you would like to give a presentation.

The talks and the discussion will be given in English.

Detailed agenda :

Morning:

- 9h30-10h20 : "Stochastic tools for sensitivity analysis - Part I: Theory and Methods", Clémentine Prieur (Université Grenoble Alpes, Laboratoire Jean Kuntzmann, Equipe-projet INRIA MOISE),
- 10h20-11h10 : "Stochastic tools for sensitivity analysis - Part II: Applications", Bertrand Iooss (EDF R&D - Département de Management des Risques Industriels),
- 11h10-11h40 : Break
- 11h40-12h30 : "Accelerating techniques for reverse analysis of stochastic problems", Didier Lucor (Institut Jean Le Rond d'Alembert, UPMC-UMR 7190),

Afternoon:

- 14h-14h50 : "Uncertainty quantification of geophysical models", Serge Guillas (University College of London)
- 14h50-15h40 : "Generation and evaluation of ensembles for data assimilation and numerical weather prediction", Loïk Berre (Météo-France/CNRS- CNRM/GAME)
- 15h40-16h00 : Break
- 16h00-16h30 : "Assimilation Variationnelle d'Ensemble et Estimation Bayésienne", Olivier Talagrand (LMD/CNRS : UMR8539/ UPMC/Polytechnique/ENS)
- 16h30-17h10 : "Uncertainties in the Offshore Wind Operations and Maintenance", Rebecca Martin (Offshore Wind O&M Research Engineer - EDF Energy R&D UK Centre Ltd)
- 17h10 - 17h30 : "Quantification of uncertainty on sediment volumes extracted or deposited in a river calculated from successive bathymetric surveys", Lucie Guertault (IRSTEA Lyon/CNR)