

Groupe de recherche MOMAS
Meeting on
the particle methods and the probabilistic models
applied to the simulation of the nuclear waste transport problems

Friday, November 22, 2002, at the Institut Henri Poincaré, Paris

Financial support provided by ANDRA, BRGM, CEA, CNRS & EDF

Introduction

- 9 h 00–9 h 10 – *Some remarks on the MOMAS targets*
A. Bourgeat (Université Claude-Bernard, Lyon)
- 9 h 10–9 h 20 – *Introduction to the meeting*
A. Lejay (INRIA-Nancy) and I. Mortazavi (MAB CNRS-UMR 5466 Bordeaux)

Industrial Research

- 9 h 20–9 h 40 – *Introduction to the numerical approaches used to approximate nuclear waste transport*
E. Mouche (CEA-Saclay)
- 9 h 40–10 h 05 – *Simulation of the dispersion and the diffusion using particle and/or Eulerian methods*
P. Maugis (CEA-Saclay)
- 10 h 05–10 h 30 – *Particle stochastic method to simulate polydispersed turbulent two-phase flows*
J.-P. Minier (EDF Chatou)
- 10 h 30–10 h 55 – *A particle-tracking method applied to the nuclear waste problems*
M.-È. Stoeckel (EDF Chatou)
- 10 h 55–11 h 20 – COFFEE BREAK
- 11 h 20–11 h 45 – *Stochastic modeling of geological heterogeneity and propagation of uncertainty: examples of application and open issues*
O. Jaquet and R. Namar (Colenco, Zurich)
- 11 h 45–12 h 10 – *A stochastic model for turbulence modelling in Smoothed Particle Hydrodynamics*
D. Violeau (EDF Chatou)
- 12 h 10–13 h 30 – LUNCH

Academic Research Issues

- 13 h 30–14 h 00 – *Particle methods for convection-diffusion-reaction problems*
A. Ghoniem (MIT, Boston)
- 14 h 00–14 h 30 – *Mixing scales for normal and anomalous diffusions*
H. Owhadi (CNRS, Marseille)
- 14 h 30–15 h 00 – *Transport and retention of tracers in randomly fractured porous media*
V. Cvetkovic (KTH, Stockholm)
- 15 h 00–15 h 30 – *Percolation, conductivity and permeability of self-affine fractures*
V. V. Mourzenko, J.-F. Thovert and P. M. Adler (Institut de Physique de Globe, Paris)
- 15 h 30–15 h 50 – COFFEE BREAK
- 15 h 50–17 h 20 – ROUND-TABLE ON THE FUTURE WORK AND COLLABORATIONS

The time scheduled for each talk contains the 5 minute question time.

Coffees and lunch are offered by the GdR MOMAS.

MEETING LOCATION: Room 201 — Institut Henri Poincaré

11, rue Pierre et Marie Curie — 75231 Paris CEDEX 05

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