

Scientific Program (as of March 18, 2004)

Monday 22 am : Growth processes and SLE

- 9 :00-9 :15 **Opening**
Francois DAVID, *SPhT, CEA/Saclay*
- 9 :15-10 :15 **Random Critical Interfaces and Stochastic Loewner Evolution.**
Denis BERNARD, *SPhT, CEA/Saclay*
- 10 :15-10 :45 **Pause**
- 10 :45-11h15 **Harmonic Measure near Conformally Invariant Scaling Curves and SLE.**
Bertrand DUPLANTIER, *SPhT, CEA/Saclay*
- 11 :15-11h45 **Fully Packed Loops**
Paul ZINN-JUSTIN, *LIFR-MIIP Moscow*
- 12 :00 **Lunch break**

Monday 22 pm : Statistical mechanics and optimization problems

- 17 :00-18 :00 **How to satisfy a network of constraints by message passing methods**
Marc MEZARD, *LPTMS, Universite Paris Sud*
- 18 :00-18 :30 **Multicanonical Chain Growth Simulations of Lattice Protein Folding.**
Wolfhard JANKE, *Institut fuer Theoretische Physik, Universitaet Leipzig*
- 18 :30-19 :00 **Why you need a functional RG to survive in a disordered world.**
Kay WIESE, *LPT, ENS*
- 19 :30 **Dinner**

Tuesday 23 am : Strings and matrices

- 9 :00-10 :00 **Strings and matrices**
Jan DE BOER, *University of Amsterdam*
- 10 :00-10 :30 **Pause**
- 10 :30-11 :00 **U(1) Coulomb-deconfinement transition in lattice compact QED from Seiberg-Witten duality**
Domenec ESPRIU, *DECM, University of Barcelona*
- 11 :00-11 :30 **Exotic trees and the IKKT matrix model.**
Bengt PETERSSON, *Fakultaet fuer Physik, Universitaet Bielefeld*
- 11 :30-12 :00 **The Seiberg-Witten map on the fuzzy sphere**
Jesper GRIMSTRUP, *University of Iceland, Reykjavik*
- 12 :00 **Lunch break**

Tuesday 23 pm : Strings and matrices

- 17 :30-18:00 **Integrability in N=4 supersymmetric gauge theory**
Didina SERBAN, *SPhT, CEA/Saclay*
- 18 :00-18 :30 **Tensionless Strings: Physical Fock Space and Higher Spin Fields**
George SAVVIDY, *Institute of Nuclear Physics, NCSR, Athens*
- 18 :30-19:00 **The 2D gonihedric spin model**
Alix PRATS, *DECM, University of Barcelona*
- 19 :30 **Dinner**

Wednesday 24 am : Branching, trees and quantum gravity

- 9 :00-10 :00 **Random real trees**
Jean-Francois LE GALL, *Ecole normale supérieure, Paris*
- 10 :00-10 :30 **Pause**
- 10 :30-11 :00 **Critical indices of combs and random combs.**
Bergfinnur DURHUUS, *Niels Bohr Institute, University of Copenhagen*
- 11 :00-11:30 **The beautiful 3+1 dimensional world created by 4d Lorentzian dynamically triangulated quantum gravity**
Jan AMBJØRN, *Niels Bohr Institute, University of Copenhagen*
- 11 :30-12 :00 **Phase Diagram of a Generalized Ginzburg-Landau Model**

4th Eurogrid Meeting - Random geometry : from theory to applications

Elmar BITTNER, *Institut fuer Theoretische Physik, Universitaet Leipzig*

12 :00 **Lunch break**

Wednesday 24 pm : Branching, trees and quantum gravity

17 :00-18 :00 **Scaling of percolation on random planar maps**

Omer ANGEL, *laboratoire de mathématique, université paris-sud*

18 :00-18 :30 **From planar maps to labeled trees**

Jérémie BOUTTIER, *SPhT, CEA/Saclay*

18 :30-19 :00 **Distance statistics in planar graphs**

Emmanuel GUITTER, *SPhT, CEA/Saclay*

19 :30 **Dinner**

20 :30-21 :00 **TBA**

Alexander NICHOLS, *Institute of Nuclear Physics, NCSR, Athens*

21 :00-21:30 **(2+1) gravity for higher genus in the polygon model**

Zoltan KADAR, *Spinoza Institute, University of Utrecht*

Thursday 25 am : QCD, lattice field theory and matrices

9 :00-10 :00 **Random Matrix Models of QCD: the Chemical Potential Problem**

Gernot AKEMANN, *SPhT, CEA/Saclay*

10 :00-10 :30 **Pause**

10 :30-11 :00 **Dirac Operator Coupled to 2D Lorentzian Quantum Gravity**

Leszek BOGACZ, *Jagellonian University, Krakow*

11 :00-11 :30 **Vacuum Condensates of Dimension Two in Pure Euclidean Yang-Mills**

Angelo Raffaele FAZIO, *Institute of Nuclear Physics, NCSR, Athens*

11 :30-12 :00 **Twisted Supersymmetry on the Lattice**

Noboru KAWAMOTO, *Dept. Phys. Hokkaido University*

12 :00 **Lunch break**

Thursday 25 pm : From non commutativity to integrability

17 :00-17 :30 **Non commutative nonlinear waves**

Thordur JONSSON, *University of Iceland, Reykjavik*

17 :30-18 :00 **Generalized one-matrix models and Isomonodromic tau functions**

Marco BERTOLA, *Concordia, Montréal.*

18 :00-18 :30 **Ordinary differential equations and the Bethe ansatz.**

Patrick DOREY, *University of Durham & SPhT, CEA/Saclay*

18 :30-19 :00 **Correlation functions of complex matrix models**

Michel BERGERE, *SPhT, CEA/Saclay*

19 :30 **Dinner**

Friday 26 am : Biology, dynamical networks

9 :00-10 :00 **RNA folding and large N matrix field theories**

Henri ORLAND, *SPhT, CEA/Saclay*

10 :00 **Pause**

10 :30-11 :00 **The kernel of tree incidence matrices, and related results**

Stéphane COULOMB, *SPhT, CEA/Saclay*

11 :00-11 :30 **Exploring the topology of RNA pseudoknots by Monte Carlo simulations**

Graziano VERNIZZI, *SPhT, CEA/Saclay*

11 :30-12 :00 **Statistical mechanics of complex networks**

Zdzislaw BURDA, *Jagellonian University, Krakow*

12 :00 **Lunch & end of the meeting**