# Colloque “Physique des phénomènes extrêmes”, Nice 25-26/11/2013

## Programme

| | 25/11/13 | 26/11/13 |
|---|---|---|
| 8h30 | Accueil | |
| 9h30 | Frédéric DIAS<br>*Extreme waves: their observation and their generation* | Yan KAGAN<br>*Earthquakes : models, statistics, testable forecast* |
| 10h30 | Holger HOMANN<br>*Turbulence as experienced by a fluid element* | Isabelle MANIGHETTI<br>*When geology questions a few common beliefs on earthquakes: a help to better understand their physics?* |
| 10h50 | Café | Café |
| 11h30 | Pavel KUZHIR<br>*Separation of magnetic nanoclusters: application to water purification* Jorge | Elisabeth LEMAIRE<br>*Rheology and microstructure of concentrated granular suspensions* |
| 11h50 | Alessandro MORBIDELLI<br>*Extreme phenomena in the process of Earth formation* | Didier CLAMOND<br>*Extreme gravity waves in the laboratory and in situ* |
| 12h10 | TREDICCE<br>*How a crisis is responsible of an extreme event* | Alexandre CHEMENDA<br>*Catastrophic rupture of geological structures as a result of progressive material damage and fracturing* |
| 12h30 | Déjeuner | Déjeuner |
| 13h30 | Discussions | Discussions |
| 14h00 | Jean-Michel RAIMOND<br>*Atoms and cavities : an extreme situation for matter-field coupling* | Stephan FAUVE<br>*Reversals of a large scale field over turbulent background* |
| 15h00 | Bruce GENDRE<br>*The Science of Gamma-Ray Bursts: caution, extreme physics at play* | Dario VINCENZI<br>*Fluctuations and intermittency in turbulent transport* |
| 15h20 | Patrizia VIGNOLO<br>*Large-momentum tails in the Tonks-Girardeau gas* | Denis TALAY<br>*Stochastic approaches for extreme phenomena: theoretical tools, numerical challenges, applications.* |
| 15h40 | Café | Café |
| 16h00 | Michael GHIL<br>*Extreme events : dynamics, statistics and prediction* | Hugo TOUCHETTE<br>*Large deviation theory : from mathematics to physics and back* |
| 17h00 | Discussions | Discussions |
| 18h00 | Fin session | Fin colloque |