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diffusion-fundamentals.org

first circular

First Circular

Diffusion Fundamentals II
Basic Principles of Theory, Experiment and Application
August 26th - 29th, 2007
L'Aquila, Italy

Two years after the Diffusion Fundamentals I Conference in Leipzig, the world-wide community of researchers in the field of diffusion is invited to L'Aquila to highlight the current developments in the field. Following the tradition of Diffusion Fundamentals I (see book announcement) a Conference Volume with paintings of L'Aquila by the Japanese physicist and artist Taro Ito will appear as a souvenir for all participants. Diffusion Fundamentals II is co-organized by University College London, University of Leipzig and University of L'Aquila.

The scientific programme includes invited **plenary talks**, covering those topics of diffusion theory, experiment and application, which are in the focus of current research. The talks will address a broad, interdisciplinary audience rather than only the specialists in the different fields and include the following topics (working titles):

Diffusion in Reduced Dimensionality

Interdiffusion in Critical Binary Mixtures by Molecular Dynamics Simulation

QENS and the Benefit of Diffusion Measurement over Different Length Scales

Correlating Nanostructure and Microdynamics

Diffusion in Hydrogeology

Genetic and Cultural Diffusion

From Molecular Diffusion to the Duck-Bill Platypus

Diffusion Challenges in (Chemical) Industries

The Invasion of Newcomers: Isotopes, Neobiota, Foreigners

NMR Imaging of Ventilation and Diffusion in Lungs

Atomistic Model of Diffusion in Solids

The following plenary speakers have accepted our invitation:

John Barker – London

Clemens Bechinger – Stuttgart

Kurt Binder – Mainz

Stefano Brandani – London

Armin Bunde – Giessen

Richard Catlow – London

Luca Cavalli-Sforza – Stanford

Mark Conradi – St. Louis

Ed Cussler – Minneapolis

Hervè Jobic – Villeurbanne

Yossi Klafter – Tel Aviv

Philip Kuchel – Sydney

Nikolaus Nestle – Ludwigshafen

Giulio Sarti – Bologna

Gero Vogl – Vienna

Each group of plenary talks shall be accompanied by **poster sessions**. Ideally, the contributions to the poster sessions should be related to the various aspects covered in the plenary talks. Correspondingly, the plenary speakers and the chairpersons of the sessions shall be asked to serve as first reviewers of the poster submissions and shall be encouraged to refer to individual posters during their presentations, whenever appropriate.

Again, to reach as many (in particular young) researchers as possible, the conference is planned as a low-cost conference (participation fee between 200,- € and 300,- € aspired, depending on the level of sponsorship), which implies to rely on information exchange by www as extensively as possible. This will in particular concern the conference contributions, which shall be published in total only electronically, as a special volume of the Online-Journal of the webseite http://www.diffusuion-fundamentals.org. The conference fee comprises catering during the conference, the social programme, including Gala Dinner, and the Conference Volume.

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The conference takes place in the city of L'Aquila one hour away from Rome. L'Aquila, laid out within medieval walls, is surrounded by mountains on all sides. A booklet by Albrecht Beutelspacher, University of Giessen, in both German and Italian (ISBN 3423330694), entitled "Pasta all'infinito - my Italian Journey into Maths", provides a nice introduction to the conference location, its people and some mathematics. As part of the social programme, with an entertaining talk on the "(wo)man on the street" he is as well going to present some mathematical surprises during the conference. Following his first visit to L'Aquila described in this book, the international community of researchers in the field of diffusion is invited to take profit of a marvelous place, not yet heavily affected by tourism, and its picturesque ambience.

Poster
Authors are requested to send their two-pages abstracts via the Internet before April 30th, 2007. Please, follow the format as given under http://www.uni-leipzig.de/diffusion/pdf/layout-poster-abstracts.doc since only in this case the contribution may be included in the Conference Volume.

Important Dates 2007

January	2nd circular, begin registration with dues
April 30	Submission of poster contributions/contributions to the Diffusion-Fundamentals Online-Journal
June 30	Registration deadline, information about acceptance of the contributions, final circular
August 19	Registration with late dues, final acceptance of poster contributions/ contributions to the Diffusion-Fundamentals Online-Journal
August 26 - 29	Diffusion Fundamentals II

Conference Chairmen: Stefano Brandani, London; Jörg Kärger, Leipzig; Roberto Volpe, L'Aquila

Scientific Committee:

Dezsö L. Beke, Debrecen	Stefano Brandani, London	Armin Bunde, Giessen
Paul Callaghan, New Zealand	Alan Chadwick, Canterbury	Marc-Olivier Coppens, Delft
Gerhard Ertl, Berlin	Dieter Freude, Leipzig	Farida Grinberg, Leipzig
Paul Heitjans, Hannover	Jörg Kärger, Leipzig	Yossi Klafter, Tel Aviv
Alfred Leipertz, Erlangen-Nuremberg	Graeme Murch, Callaghan	Harry Pfeifer, Leipzig
Jean Philibert, Paris	William S. Price, Sydney	Douglas M. Ruthven, Orono
Michael J. Saxton, Davis	Gunter Schütz, Jülich	Doros Theodorou, Athens
Ilpo Vattulainen, Helsinki	Gero Vogl, Vienna	George H. Weiss, Bethesda

Organizing Committee: Christian Chmelik, Tomas Binder

If you are interested in participation in the Conference you can pre-register at the website at
http://www.uni-leipzig.de/diffusion/pages/conf2007-preregistration.php
We will send you the -Second Circular- together with the final registration form in January 2007.

A poster announcing the conference may be found under http://www.uni-leipzig.de/diffusion/pdf/diff-fund-II.pdf (pdf, 0.3 MB).