Science at the Market:

Photonics

Saturday, June 2, 8:00 Am – 12:00 Pm

Urbana Market at Square, Lincoln Square Urbana, IL

For the 9th year, the U of I is bringing "Science at the Market" on most Saturday mornings to the Farmers Market at Lincoln Square mall in Urbana.

The U of I and other experts will be on hand with demonstrations illustrating the science they represent, and to answer questions from the public about the researchers' discipline.
12th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors (M²S-2018) will be held in Beijing International Convention Center, Beijing, China, during August 19-24, 2018 (http://www.m2s-2018.com/). It is hosted by National Lab for Superconductivity, Institute of Physics, Chinese Academy of Sciences.

The M²S conference is an international event on superconductors and mechanisms of superconductivity held now every three years. The first conference took place in 1988 in Interlaken in the wake of the discovery of high temperature superconductivity by the Nobel Prize winners Johannes Georg Bednorz and Karl Alexander Müller.

The aim of the M²S Conference is to provide a platform for members of the international superconductivity community to report their latest results, exchange information and ideas, and foster collaborations. The Conference is dedicated to all aspects of basic superconductivity research in materials, mechanisms and phenomena of superconductivity, and its applications.

M²S-2018 is now calling for abstracts. **The deadline for early-bird registration abstract submission is extended to June 15, 2018.**

The Conference Website: http://www.m2s-2018.com/
Contact Email: m2s2018@iphy.ac.cn
Job Opportunity

Multi-scale Modeling of Plasticity in Amorphous Solids
At Lab. PMMH (www.pmmh.espci.fr), CNRS/ESPCI/Paris 6/Paris 7, Paris, France

The hired postdoc will be part of a multi-scale research project focused on the mechanical properties of amorphous materials. Project efforts will focus on the characterization and modeling at mesoscopic and/or continuous scales, via numerical and theoretical approaches, depending of the background of the candidate. Using a coarse-grained approach, we will derive a constitutive law in the continuum mechanics framework, in accordance with the results harvested at atomic scales. A sustained dialogue with the other members of the group studying atomic level mechanics is therefore strongly desired to make the different approaches on different scales “feed” each other, the multi-scale aspect being a key point in this project. The appointment of postdoctoral fellow will be for 18 months. We envisage a starting date in September 2018, but this is flexible.

Application in English must be submitted electronically by sending an email with “Apply for ANR JCJC postdoc” as a subject to sylvain.patinet@espci.fr. The application must include the following:
- Complete curriculum vita.
- Complete list of publications.
- Description of current research and a cover letter.
- Full contact information (name, address, telephone & email) of three professional referees who may be contacted for references.
Saturday, June 2: Science at the Market: Photonics; 8:00 am to Noon at Lincoln Square Mall’s Market at the Square

Wednesday, June 6 Thesis Defense: "Probing Proximity Induced Superconductivity in Nb-Bi2Se3 Bilayers with Low-temperature Transport and Josephson Interferometry"; Eric Huemiller 3:30 pm in 222 Loomis

Saturday, June 9: Science at the Market: Carl R. Woese Institute for Genomic Biology (IGB); 8:00 am to Noon at Lincoln Square Mall’s Market at the Square

Visitors:

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**Thesis Defense:**

**Title:** "Probing Proximity Induced Superconductivity in Nb-Bi2Se3 Bilayers with Low-temperature Transport and Josephson Interferometry"

Speaker: Erik Huemiller

Tuesday, June 06, 2018

Room 222 Loomis Lab  at 3:30 pm
CALENDAR OF EVENTS http://physics.illinois.edu/bluesheet.asp

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Visitors:

**Job Opportunity**

**Post-doc: Modeling vaccination/niche competition in the gut for microbiota engineering**

The postdoc will analyze experimental data to extract information about the bacterial populations dynamics. He/she will develop biophysical models of the microbiota dynamics in the gut, integrating immune dynamics and competition, and animal size and physiology. Beyond the direct applications to the experiments of the project, the goal is to gain a better understanding on how the physical conditions in the gut interplay with the microbiota dynamics.

The postdoc will be based in Sorbonne Université, Paris, under the supervision of Claude Loverdo, and the work will be in close collaboration with Emma Slack, ETH Zürich. The postdoc will be integrated to the theory team of the Laboratoire Jean Perrin, a young and dynamic biophysical lab, in the center of Paris. The postdoc duration is 12+ months, start date negotiable from September 2018, with salary according to experience.

The candidate should have a PhD (or have it completed before the start of the position), in physics or a related field, and a strong experience in modeling. Moreover he/she should have a deep interest and possibly a previous experience in biology.

If you are interested please send us a CV and a short email motivating your interest in the position.

Claude Loverdo claude.loverdo@upmc.fr
Emma Slack emma.slack@micro.biol.ethz.ch
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**Job Opportunity**

**Postdoc position: modeling in cell biophysics**

Lehigh University

A postdoctoral position is available in the Vavylonis group ([http://athena.physics.lehigh.edu/](http://athena.physics.lehigh.edu/)), focusing on the biophysics of cell motion, polarization, and division. The position is for someone interested in applying mathematical/computational tools and concepts of physics and engineering to cell biological systems. Several opportunities exist for collaboration with experimental cell biologists as well as with the group of Jeetain Mittal at Lehigh University to develop coarse-grained modeling methods for the cytoskeleton and its interaction with membranes. The position is funded by NIH and is available for two years.

Candidates with background in biophysics, bioengineering, statistical physics, soft matter physics, computational physics, or related areas are encouraged to apply and inquire about career development possibilities. Lehigh University is located in eastern Pennsylvania, north of Philadelphia and west of New York City.

For more details and to apply, please contact Dimitrios Vavylonis at vavylonis@lehigh.edu
In the context of the EU H2020 project FET NANOPHLOW we are seeking 4 highly qualified post-doctoral researchers for an exciting collaborative project on the fundamental challenges of thermodynamic gradient driven transport.

The postdoctoral positions will address complementary aspects related to the fundamental challenges of thermodynamic driving. The broad, theoretical approach will provide a systematic way to go beyond the state-of-the-art macroscopic descriptions of phoresis to capture the effects of the molecular nature of solvent and solute, solute size, solute and surface specificity, solute flexibility, surface wettability and heterogeneity, fluctuations and correlations.

The projects will be carried out under the supervision of Prof. I. Pagonabarraga (Univ. Barcelona), B. Rotenberg (Sorbonne Univ., Paris), E. Trizac (Univ. Paris-Sud, Orsay), and R.van Roij (Univ. of Utrecht).

We seek motivated researchers, with theoretical and computational expertise. Candidates should have a background in computer simulation (atomistic MD, coarse-grained MD), statistical mechanics, biophysics or soft condensed matter. Candidates with an appropriate background, who are interested in a cutting-edge research at the interface between physics and the biological sciences, are invited to apply. Postdoctoral positions are for a period of two years, with starting date as soon as possible, and in any case before Jan 2019.

Positions will be filled as we identify suitable candidates.

Interested candidates can apply by sending their CV (including publication list) and a short research statement (with plans and motivations) by email to the PI of their interest in Barcelona, Paris, and/or Utrecht with subject: "Application Nanophlow". Multiple applications are allowed.
**Science at the Market:**

**Carl R. Woese Institute for Genomic Biology (IGB)**

Saturday, June 9 8:00 Am – 12:00 Pm

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