

Phonons and Fluctuations meeting 9th November 2010

Venue: Langevin Amphitheater
 Ecole Supérieure de Physique et de Chimie Industrielle de Paris
 15 rue Vauquelin
 75005 Paris
 FRANCE
<http://www.espci.fr/contact/plan-acces>

AIM: To bring the phonon and fluctuations communities together seeking convergence of partners of different projects, networks, conference series, such as NANOICT, the CNRS-network, NANO-TEC, NANOFUNCTION, NANOPOWER, ZEROPOWER, the school series Son et Lumiere, etc, in order to address topics of general concern, discuss the research trends and applications of, for example, thermal management on the nano scale, low energy ICT, nanophononics, the role of noise in ICT research and emerging design issues in future ICT. The workshop will have a combined character of touching base on the state of the art and vision in these fields

Organisers: Sebastian Volz, Jouni Ahopelto and Cliva M Sotomayor Torres
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Monday 8 th November 2010		
20.00	Get together and Joint dinner	Details & place to be announced
Tuesday 9 th November 2010		
09.00	Welcome and Introduction	Jouni Ahopelto (VTT), Sebastian Volz (ECP) and Clivia M Sotomayor Torres (Catalan Institute of Nanotechnology)
09.05	Research developments and trends: <ul style="list-style-type: none"> - Report on the Int Workshop on the Future of Information Processing Technologies (focus: Green electronics) - Report on the EU-NSF workshop on Nanotechnology: a 10-year perspective, section on Nanoelectronics - Emerging design Issues - The NANOICT Phononics Working group - Update on the Flagship Beyond the ICT Limits 	<ul style="list-style-type: none"> - Werner Steinhoegel (European Commission) - Clivia Sotomayor Torres (Catalan Institute of Nanotechnology)- may be replaced by a poster if time is short - Wolfgang Rosenstiel (U Tuebingen) - Jouni Ahopelto (VTT) - Clivia Sotomayor Torres (Catalan Institute of Nanotechnology) or J-N Patillon (CEA) tbc
9.30	Noise driven ICT	Luca Gammaitoni (NIPS Laboratory, U Perugia)
09.50	Nanomechanical oscillations	Adrian Bachtold (ICN)
10.10	Trends in statistical physics on fluctuations research	to be announced
10.30	Coffee break & poster viewing	
11.10	Ultrafast energy and momentum transfer	Bernard Perrin (U P et M Curie)
11.30	Towards an understanding of thermal energy across interfaces	Javier Goicochea (IBM Zurich)

11.50-12.10	Design for future low power and high reliability circuits	Wolfgang Rosenstiel (U Tuebingen)
12.10	Discussion	
12.30	Sandwich Lunch	
13.30	Near field radiation based on phonon polaritons	To be announced
13.50	Nanophononics for thermoelectricity	Natalio Mingo (CEA)
14.10	Low temperatures phonon transport in nanowires	Olivier Bourgeois (Néel Institute)
14.30	Fluctuations and thermal interface resistance	Sebastian Volz (ECP)
14.50	Discussion	
15.20	Poster viewing and discussions	
16.00	End	

Support:



NANOSCALE/THERMAL

NANOPower



ZEROPOWER



IMPORTANT ** Registration **** IMPORTANT**

There is no registration fee but prospective participants are kindly requested to register by completing the Doodle using the link in the announcement message by 2nd of November. In it we kindly ask you to indicate if you:

- Will participate
- Will join the dinner (November 8th) and
- Will present a poster.

Queries on local arrangements by e- mail to volz@em2c.ecp.fr