

Energy Dissipation in Nanocontacts and Molecular Bonds

28 September - 01 October 2009

Scientific coordination:

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Organisation:

Claudia Pönisch, MPI für Physik komplexer Systeme, Dresden, Germany

The main objective is to bring together theorists and experimentalists from several related fields and exchange newly upcoming ideas on nanoscale dissipation. The focus will be on friction force microscopy, non-contact atomic force microscopy, dynamic force spectroscopy, and related topics like cell rolling and adhesion, macroscopic friction and fracture, and irreversibility *per se*. Complementary to the forces, the aspect of energy dissipation has lately moved into the focus of many of the above fields. While the experimental techniques are able to quantify energy dissipation down to the scale of a few meV, the atomic origins are largely unclear. The intention of the workshop is to put particular emphasis on the latter aspect - nanoscale energy dissipation - from the experimental, simulation, modeling, and fundamental viewpoint.

Invited speakers:
(* to be confirmed)

D. Anselmetti (Bielefeld)

A. Baratoff (Basel)

R.W. Carpick (Philadelphia)

O. Custance (Osaka)

M. Dienwiebel (Karlsruhe)

D. Dietzel (Münster)

D. Ebeling (Münster)

E.A. Evans (Vancouver)

M. Evstigneev (Bielefeld)

J. Fineberg (Jerusalem)

R. Garcia (Madrid)

B. Gotsmann (Zürich)

P. Hinterdorfer (Linz)

G. Hummer (Bethesda)

D. Johannsmann (Clausthal)

L. Kantorovich (London)

U. Landmann (Atlanta)

M. Marder* (Austin)

E. Meyer (Basel)

M. Müser (Ontario)

R. Overney (Seattle)

R. Perez (Madrid)

B.N.J. Persson (Jülich)

F. Ritort (Barcelona)

M. Robbins (Baltimore)

U.D. Schwarz (New Haven)

U. Schwarz (Karlsruhe)

U. Seifert (Stuttgart)

R. Smith (Loughborough)

R. Stark (Munich)

I. Stich (Bratislava)

M. Urbakh (Tel Aviv)

Ch. Van den Broeck (Hasselt)

A. Vanossi (Modena)

Applications are welcome and should be made by using the application form on the conference web page (please see URL below). The number of attendees is limited. The **registration fee** for the focus workshop is **100 €** and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

Deadline for registration is May 31, 2009.



For further information please contact:

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