

# Condensed Matter Physics & NanoTribology - Conference in Honor of Erio Tosatti -

13 - 15 November, 2023  
ICTP, Leonardo Building - Budinich Lecture Hall,  
Miramare (Trieste), Italy  
Organizers: G. Santoro - A. Vanossi - R. Fazio - S. Scandolo

Time	Monday 13	Tuesday 14	Wednesday 15
8.30 - 8.50	Registration		
8.50 - 9.00	Opening		
<i>CHAIR</i>	<i>Santoro</i>	<i>Vanossi</i>	<i>Tosatti</i>
9.00 - 9.40	<b>PARRINELLO</b>	<b>URBAKH</b>	<b>BECHINGER</b>
9.40 - 10.20	<b>LAIO</b>	<b>MISTURA</b>	<b>PERSSON</b>
10.20 - 10.50	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>
10.50 - 11.30	<b>CAR</b>	<b>MEYER</b>	<b>SIRIA</b>
11.30 - 12.10	<b>FABRIZIO</b>	<b>MANINI</b>	<b>HOD</b>
12.10 - 14.00	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch Reception</i>
<i>CHAIR</i>	<i>Fazio</i>	<i>Scandolo</i>	<i>Tosatti</i>
14.00 - 14.40	<b>GALLI</b>	<b>MAURI</b>	<b>PIETRONERO</b>
14.40 - 15.20	<b>PASSERONE</b>	<b>PROFETA</b>	<b>LITTLEWOOD</b>
15.20 - 15.50	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Conclusions by Erio &amp; Coffee Break</i>
15.50 - 16.30	<b>RIEDO</b>	<b>WANG</b>	
16.30 - 17.10	<b>BERNASCONI</b>	<b>FERRANDO</b>	
17.10 - 17.50		<b>BASKARAN</b>	
	<i>Welcome Reception 7.00 pm</i>	<i>Social Dinner 8.00 pm</i>	

## **INVITED SPEAKERS**

\* **Ganapathy Baskaran** (baskaran@imsc.res.in)

*TBA*

\* **Clemens Bechinger** (clemens.bechinger@uni-konstanz.de)

*Friction of Brownian Particles in Nonequilibrium Baths*

\* **Marco Bernasconi** (marco.bernasconi@unimib.it)

*Simulations of phase change alloys for embedded electronic memories*

\* **Roberto Car** (rcar@princeton.edu)

*TBA*

\* **Michele Fabrizio** (fabrizio@sissa.it)

*Local Kekulé distortions can stabilise topological insulating phases in magic-angle twisted bilayer graphene*

\* **Riccardo Ferrando** (ferrando@fisica.unige.it)

*Growth of metallic nanoparticles -- An atomistic view*

\* **Giulia Galli** (gagalli@uchicago.edu)

*Electronic structure and coherent states of spin defects in solids*

\* **Oded Hod** (odedhod@tauex.tau.ac.il)

*Layered Ferroelectricity: from Geometric Measures to First-Principles Calculations*

\* **Alessandro Laio** (laio@sissa.it)

*Identifying informative distance measures in high-dimensional feature spaces*

\* **Peter Littlewood** (littlewood@uchicago.edu)

*Effects of elastic coupling at structural phase transitions*

\* **Nicola Manini** (nicola.manini@fisica.unimi.it)

*Phonon Dissipation in sliding friction*

\* **Francesco Mauri** (francesco.mauri@uniroma1.it)

*TBA*

- \* **Ernst Meyer** (ernst.meyer@unibas.ch)  
*Force experiments on 2d-materials*
- \* **Giampaolo Mistura** (giampaolo.mistura@unipd.it)  
Passive and active control of drop motion on slippery lubricated surfaces
- \* **Michele Parrinello** (michele.parrinello@iit.it)  
*The surface physics of catalysis*
- \* **Daniele Passerone** (Daniele.Passerone@empa.ch)  
*Atomistic modelling in the experimentalists lair: highlights from a theoretician paradise*
- \* **Bo Persson** (b.persson@fz-juelich.de)  
*Multiscale contact mechanics theory with application to adhesion*
- \* **Luciano Pietronero** (luciano.pietronero@roma1.infn.it)  
*Economic Fitness: Concepts, Methods and Applications*
- \* **Gianni Profeta** (gianni.profeta@univaq.it)  
*Silicon surfaces, Erio, are we still there?*
- \* **Elisa Riedo** (er124@nyu.edu)  
*Elasticity and Dissipation in 2D*
- \* **Alessandro Siria** (alessandro.siria@lps.ens.fr)  
*Experimental investigation of quantum liquid-solid friction*
- \* **Michael Urbakh** (urbakh@tauex.tau.ac.il)  
*Structural lubricity in layered material interfaces*
- \* **Xiaoqun Wang** (Xiaoqunwang@zju.edu.cn)  
*A density-matrix renormalization group algorithm for non-hermitian physics*