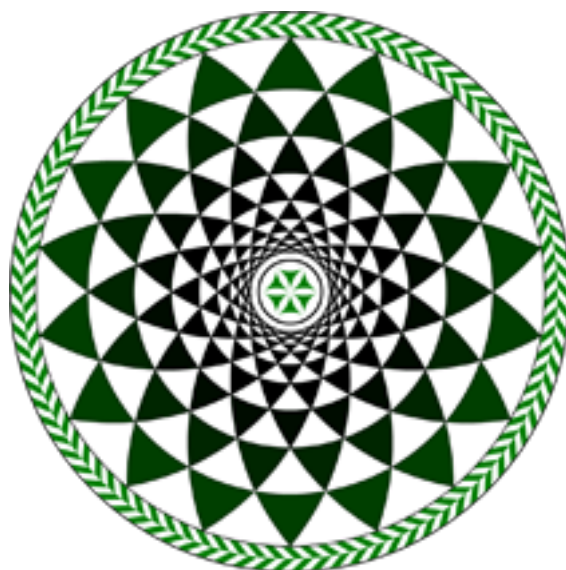


# Multiscale phenomena in molecular matter



Monday, July 3, 2017 - Thursday, July 6, 2017

## Scientific Program

The conference is devoted to research on molecular materials, i.e. liquid crystals, glass formers, molecular magnets and nanomagnets, molecular layered systems, polymers as well as biology-oriented and advanced materials for applications. Structure, dynamics, relaxation, magnetism, acoustics and other properties as probed by various experimental techniques and theoretical tools within a broad range of time- and length-scales will be discussed.

We plan 1 opening lecture (50 minutes), 3 keynote lectures (40 minutes), 19 invited talks (30 minutes), 15 oral presentations (20 minutes) - discussion included. A poster session will be also arranged.

The conference will be divided into the following sessions:

1. Soft matter and glass formers.
2. Molecular magnets and nanomagnets.
3. Multifunctional materials.
4. Surfaces and interfaces.
5. Miscellany (biologically oriented systems, new ideas, advanced methods,...).

**Confirmed speakers**

**Kamel Boukheddaden**

University Paris Saclay

*Spatiotemporal observation and modelling of temperature scan rate effects on the thermal hysteresis and the dynamics of interface propagation in a spin-crossover single crystal*

**Lucia Calucci**

ICCOM, Pisa

*Multiscale investigation of MgO-based cements by NMR spectroscopy and relaxometry*

**Simone Capaccioli**

University of Pisa

*Dielectric spectroscopy in bulk and at nanoscale*

**Eugenio Coronado**

University of Valencia

*Physics and chemistry in 2D materials: From 2D superconductors and magnets to hybrid molecular/2D heterostructures*

**Maria da Silva Eusébio**

University of Coimbra

*Accounts of pharmaceutical co-crystals and of plastic crystal mesophases*

**Marco Evangelisti**

University of Zaragoza

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Probing temperature changes in magnetocaloric molecular matter</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Yann Garcia</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Catholic University of Louvain</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Lattice dynamics in selected 1D coordination polymers</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Karoliina Honkala</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">University of Jyväskylä</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Electrochemical reduction of NO on Pt(100): a combined DFT and KMC study</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Mark Johnson</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Institute Laue-Langevin</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Neutrons and atomistic simulations to study multiscale phenomena in molecular systems</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Shinya Koshihara</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Tokyo Institute of Technology</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Ultrafast photo-control of ferroelectric order in organic and inorganic strongly correlated matters: role of hidden state</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Friedrich Kremer</span></span>

<span style="font-family:arial,Helvetica,sans-serif">University of Leipzig</span></span>

<span style="font-family:arial,Helvetica,sans-serif">The extraordinary mechanical properties of spider silk and its molecular foundation</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Núria López</span></span>

<span style="font-family:arial,Helvetica,sans-serif">ICIQ, Spain</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Exploring complexity in oxides</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Mark W. Meisel</span></span>

<span style="font-family:arial,Helvetica,sans-serif">University of Florida</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Manipulating magnetic domains at interfaces of coordination-polymer, nanosized heterostructures</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Motohiro Nakano</span></span>

<span style="font-family:arial,Helvetica,sans-serif">Osaka

University

*Spin-crossover phenomena of a Jahn-Teller active Mn(III) complex [Mn(taa)]*

**Christian Naether**

Kiel University

*Polymorphism and isomerism in coordination compounds: the nemesis of crystal design*

**Alžbeta Orendáčová**

Šafárik University

*Interplay of spin and spatial anisotropy in quasi-two-dimensional quantum magnets*

**Francis Pratt**

ISIS, UK

*Surface dynamics of polymers studied using low energy muons*

**Victoria Garcia Sakai**

ISIS, UK

*Using neutron techniques to explore the properties of thiophene-based polymers for organic electronics*

**Marzena Tykarska**

WAT, Poland

*Helical structure of liquid crystals tested by spectroscopy methods*

**Job Ubbink**

California Polytechnic University

*Multiscale structure in amorphous carbohydrate matrices in relation to phase behavior, molecular packing and interaction with water*

**Robert Podgajny**

Jagiellonian University

*Functionalization of cyanido-bridged clusters by ligand decoration and metal ion embedment*

**Jun Yamamoto**

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">Kyoto University</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">*Slippery interfaces - dynamics of director and helix rotations*</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">**Yasuhisa Yamamura**</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">University of Tsukuba</span></span>

<span style="font-size:14px"><span style="font-family:arial,Helvetica,sans-serif">*Reentrant phenomenon and odd-even effect in homologous binary system of 4 alkyl-4'-cyanobiphenyl (nCB)*</span></span>









**Soft matter and glass formers**

**Molecular magnets and nanomagnets**

**Multifunctional materials**

**Surfaces and interfaces**

**Miscellany (biologically oriented systems, new ideas, advanced methods,...)**