



# EUROPEAN SCHOOL ON MAGNETISM

## 2011

### TIME-DEPENDENT PHENOMENA IN MAGNETISM

Aug 22nd - Sep. 2nd

2011

Targoviste - Romania

$$+ \frac{\sum m_i m_j}{3k_B T} - J_H S_i^2 - J_H (\vec{r}_i \cdot \vec{r}_j)$$

$$M_S = (m_T - n_D) \mu_B$$

$$\leq m \mu_B$$



<http://esm.neel.cnrs.fr>

#### Organizers

- Jan VOGEL (chair), Grenoble
- Olivier FRUCHART, Grenoble
- Olivier ISNARD, Grenoble
- Claudine LACROIX, Grenoble
- Ioan CUCIU, Targoviste
- Calin OROS, Targoviste
- Laura M. GORGHIU, Targoviste
- Irina NITA, Targoviste
- Gabriel POPA, Targoviste
- Claudia STICHI, Targoviste
- Marinela VOICU, Targoviste

#### Scientific committee

- L. ABELMANN, Twente
- E. BRÜCK, Delft
- E. BURZO, Cluj
- M. COEY, Dublin
- T. DIETL, Warsaw
- O. FRUCHART, Grenoble
- P. GAMBARDELLA, Barcelona
- O. ISNARD, Grenoble
- J. KIRSCHNER, Halle
- C. LACROIX, Grenoble
- M. RICHTER, Dresden
- D. SANDER, Halle
- L. SCHULTZ, Dresden
- H. SPAŁEK, Krakow
- J. VOGEL, Grenoble
- W. WULFHEKEL, Karlsruhe

#### European partners

- Institut Néel & Spintec, Grenoble
- Babes-Bolyai University, Cluj-Napoca
- University of Technology, Delft
- MPI für Mikrostrukturphysik, Halle
- IFW, Dresden
- ICN, Barcelona
- Trinity college, Dublin
- Academy of sciences, Warsaw

#### Scope

The European School on Magnetism (ESM) is a joint action of the European Community of Magnetism, organized in cooperation with JEMS conference (Joint European Magnetic Symposia). ESM aims at providing young scientists with a thorough insight in the fundamentals of magnetism up to its most modern aspects.

Like previous editions of ESM, the 2011 School is based on a broad series of fundamental lectures, before focusing on a special topic. The topic selected for 2011, time-dependent phenomena in magnetism, covers a wide range of phenomena from slow relaxation to femto-second dynamics, raising both fundamental issues of condensed matter physics, and opportunities for applications.

#### Topics

- ▶ Basic concepts
- ▶ Exchange interactions and ordering
- ▶ Coupling with the lattice
- ▶ Temperature effects
- ▶ Slow dynamics
- ▶ Precessional dynamics
- ▶ Ultra-fast dynamics
- ▶ Experimental techniques

#### Means of learning

Promoting a tight interaction between lecturers and attendees is a crucial aspect of ESM. To achieve this, the 40 hours of lectures alternate with question sessions, analytical and numerical practicals, access to library dedicated to magnetism, and poster sessions dedicated to attendees' activities.

#### Lecturers

- D. Andreica (ro), G. Bayreuther (de), S. Blundell (uk), E. Brück (nl), E. Burzo (ro), A. Cornia (it), U. Ebels (fr), P. Holdsworth (fr), W. Hübner (de), A. Kirilyuk (nl), P. Mendels (fr), Z. Neda (ro), S. Petit (fr), S. Raymond (fr), S. Rohart (fr), J. Vogel (fr), H. Zabel (de)

