



## IV Euro-Asian Symposium “Trends in MAGnetism”: Nanospintronics EASTMAG – 2010.

June 28 – July 2, 2010, Ekaterinburg, Russia  
<http://conference.imp.uran.ru/en/eastmag2010>  
[eastmag2010@imp.uran.ru](mailto:eastmag2010@imp.uran.ru)



**IV Euro-Asian Symposium “Trends in MAGnetism”: Nanospintronics.  
EASTMAG – 2010,  
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### **FIRST ANNOUNCEMENT**

Dear Colleagues, Dear Friends,

We are pleased to announce the 4-th event in the EASTMAG symposium series. The **IV Euro-Asian Symposium “Trends in MAGnetism”: Nanospintronics (EASTMAG – 2010)** will take place between June 28 and July 2 in the Institute of Metal Physics Ural Branch of the Russian Academy of Sciences (IMP UB RAS) in the city of Ekaterinburg, Russia. In line with the traditions of preceding symposiums the participants are encouraged to explore the most actual problems of magnetism and magnetic materials. Central attention will be paid to the fundamental problems of spin-based electronics and spin transport. The symposium will feature oral and poster sessions leaving plenty of time for in-depth discussions in a friendly informal atmosphere.

### **General Information**

**EASTMAG – 2010** continues the tradition of important scientific symposiums on topical problems of magnetism and magnetic materials which consolidate scientists from Russia and other countries working in these fields. This series of symposiums started in the Institute of Metal Physics UB RAS (the city of Ekaterinburg, Russia) in 2001. The previous III EASTMAG symposium took place in the city of Kazan, Russia, in 2007. The EASTMAG-2010 Symposium is devoted to the centennial anniversary of the outstanding Russian scientist academician S.V.Vonsovsky, who worked in the field of magnetism.

The city of Ekaterinburg (<http://www.ekaterinburg.tv/>) was founded in 1723. Now it is the capital of the Sverdlovsk region. With the population of 1.324 million of people the city is one of the greatest industrial centers in Russia. Ekaterinburg is the scientific and cultural capital of the Ural Federal Region. The city is located near the Europe-Asia geographical border. The cultural program of Symposium will include both the city tours and visits to numerous museums and theaters and also excursions to the picturesque environments of Ekaterinburg including the Europe-Asia geographical border.

### **Symposium Organizers**

The Branch of the physical sciences of RAS

The Branch of nanotechnologies and information technologies of RAS

The Ural Branch of the Russian Academy of Sciences.  
Institute of Metal Physics UB RAS.

### **Symposium Sponsors**

The Ural Branch of the Russian Academy of Sciences.  
The Ministry of High education and Science of the Russia  
Russian Foundation for Basic Research  
The non-profit Dynasty Foundation  
NT-MDT Company  
The companies which participate in the exhibition of scientific equipment.

### **Scientific Program**

**The scientific program** of the IV Euro-Asian Symposium “Trends in Magnetism”: Nanospintronics includes the following topics:

Spin Polarized Transport  
Spin Dynamics, Spin Waves, Spin-Wave Resonance  
Spin Reorientation Phase Transitions  
Spin-Orbit and Exchange Interactions, Magnetic Anisotropy and Magnetostriction  
Dynamics of Domain Structures and Domain Walls  
Magnetic Nanostructures and Films  
Magnetism and Nanomaterials  
Low-Dimensional Magnetism  
Magnetism of Strongly Correlated Electron Systems  
Magnetotransport and Magneto-optics

During Symposium the school for young scientists “Spintronics” will be organized.

During Symposium the practical Seminar on Magnetic Force Microscopy (MFM) will be organized. It will be supported by the NT-MDT company instruments and qualified personnel.

### **Organization Committee**

Symposium Chairman - Ustinov V., Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Symposium Secretary - Nosov A., Institute of Metal Physics UB RAS, Ekaterinburg, Russia,  
([eastmag2010@imp.uran.ru](mailto:eastmag2010@imp.uran.ru)). Tel: +7-343-3873587. FAX: +7-343-3745244.

Program Committee Chairman - Mushnikov N., Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Local Committee Chairman - Rinkevich A., Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Publication Committee Chairman - Gerasimov E., Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Internet site: <http://conference.imp.uran.ru/en/eastmag2010/>

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### **Program Committee**

Mushnikov N. - Chairman, Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Baranov N. - Deputy Chairman Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Uimin M. – Scientific Secretary, Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Anisimov V. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Aronzon B. - Russian Research Center «Kurchatov Institute», Moscow, Russia.

Bebenin N. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Borisov A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Dragoshansky Yu. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Gorbatsevich A. - St’Petersburg Physics and Technology Centre for Research and Education of RAS, Saint Petersburg, Russia

Granovsky A. - M.V.Lomonosov Moscow State University, Moscow, Russia.

Irkhin V. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Ivanov A. - Ural State University, Ekaterinburg, Russia.

Kassan-Ogly F. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Korolev A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.

Kugel K. - Institute for Theoretical and Applied Electrodynamics of RAS, Moscow, Russia.

Kurkin M. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Kusraev Yu. - Ioffe Physico-Technical Institute of RAS, Saint Petersburg, Russia  
Menshenin V. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Moskvin A. - Ural State University, Ekaterinburg, Russia.  
Pamyatnykh E. - Ural State University, Ekaterinburg, Russia.  
Pastushenkov Yu. - Tver State University, Tver, Russia.  
Perov N. - M.V.Lomonosov Moscow State University, Moscow, Russia.  
Popov A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Salikhov K. - Zavoisky Physical-Technical Institute of the Kazan Scientific Center of RAS, Kazan, Russian  
Shavrov V. - Institute of Radioengineering and Electronics of RAS, Moscow, Russia.  
Shvachko Yu. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Sibeldin N. - Lebedev Physical Institute of RAS, Moscow, Russia.  
Skryabin Yu. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Tankeev A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Vaskovski V. - Ural State University, Ekaterinburg, Russia.  
Yermakov A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Zilberman P. - Institute of Radio Engineering of RAS, Moscow, Russia.

### **Advisory Committee**

Andreev A. - P.L.Kapitza Institute for Physical Problems of RAS, Moscow, Russia.  
Demangeat C. – Strasbourg University, Strasbourg, France.  
Ermolenko A. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
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Kurmaev E. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Ovchinnikov S. - Kirensky Institute of Physics of SB RAS, Krasnoyarsk, Russia.  
Parkin S. - IBM Almaden Research Center, San Jose, USA.  
Scherbinin V. - Institute of Metal Physics UB RAS, Ekaterinburg, Russia.  
Szymczak H. – Institute of Physics Polish Academy of Sciences, Warszawa, Poland.  
Tagirov L. – Kazan State University, Kazan, Russia.  
Vedyayev A. - M.V.Lomonosov Moscow State University, Moscow, Russia.  
Zabel H. – Ruhr University Bochum, Bochum, Germany.

### **Important Dates**

**October, 2009** - First Circular.

**February 15, 2010** - deadline for registration and Abstract submission.

**March 31, 2010** - notification about acceptance of Abstracts.

**April 15, 2010** - Second Circular.

**June 28, 2010** - EASTMAG-2010 start.

### **Invited Lecturers Confirmed (preliminary info)**

Cowburn R. (Imperial College London, London UK)

“Domain walls in nanowires”

Farle M. (Universität Duisburg-Essen, Duisburg, Germany)

“Spin dynamics of magnetic nanocubes”

Filippov B. (Institute of Metal Physics UB RAS, Ekaterinburg, Russia).

«Nonlinear dynamic reconstruction of domain structure and connected with it magnetic losses in soft magnetic materials.»

Fraerman A. (Institute for physics of microstructures RAS, Nizhny Novgorod, Russia)

"Topological Hall effect in ferromagnetic nanostructures"

Franco V. (Universidad de Sevilla, Sevilla, Spain)

“Magnetocaloric effect and scaling laws”

Izyumov Yu. (Institute of Metal Physics UB RAS, Ekaterinburg, Russia)

“In memory of S.V.Vonsovsky”.

Khomski D. (University of Cologne, Cologne, Germany)

“Novel states in oxides close to Mott transition”

Klaur M. (Universität Konstanz, Konstanz, Germany)

“Current-induced magnetization dynamics”

Lee S. (Korea Atomic Energy Research Institute, Daejeon, Korea)

“Neutron scattering studies of the multiferroic x-tal BiFeO<sub>3</sub>”

Moskvin A. (Ural State University, Ekaterinburg, Russia)

“Mechanisms of spin-dependent electric polarization and multiferroic behavior in strongly correlated 3d systems”

Ovchinnikov S. (Kirensky Institute of Physics, Siberian Branch of RAS, Krasnoyarsk, Russia)

“Effect of short order antiferromagnetic correlations on the normal and superconducting properties of copper oxides”

Podlesnyak A. (Oak Ridge National Laboratory, Oak Ridge, USA)

“Spin-state polarons in perovskite cobaltites”

Saxena S. (Cavendish Laboratory, Cambridge, UK)

“Quantum Criticality in Magnetic and Ferroelectric Systems”

Vedyaev A. (M.V.Lomonosov Moscow State University, Moscow, Russia)

“Spin polarized transport”.

Zilberman P. (Institute of Radio Engineering of RAS, Moscow, Russia)

“Spin polarized current in magnetic nano-junctions”

## **The Official Language**

The official language of Symposium is English.

## **Symposium Fee**

The Symposium Fee for participants is 300€ and for accompanying persons - 100€. The Symposium Fee for participants includes: Welcome party, coffee breaks, admission to all technical sessions, symposium bag including book of abstracts, proceedings on CD. Admissions will be only granted with a valid personal badge which is nontransferable to other persons. The badge will be handed over at the registration desk after proof of payment. The Symposium Fee will be waived for the Invited Lecturers. Individual discounts will be made for young scientists and accompanying persons. For some of participants the sum of the Symposium Fee can be lowered with an account for individual reasons. Please contact the Organizing Committee.

## **Visa to Russia**

Non-Russian citizens need a visa to enter Russia. It can be obtained in the Russian embassy or consulate with the Official Invitation Letter from the EASTMAG-2010 Organizing Committee. The Official Invitation Letter must contain the personal data for each participant; therefore the personal data from the first and second pages of passport should be submitted to the Organizing Committee with the Abstracts. To ensure the best quality please scan the passport and send a picture by E-mail. Please keep in mind that the exact time to get your visa depends on the working regime of the Russian embassy or consulate in your country. For exact information please consult the nearest Russian embassy or consulate.

## **Transportation to Ekaterinburg**

You can reach Ekaterinburg by airplane (Ekaterinburg airport Koltsovo (SVX) <http://www.koltsovo.ru/?a=000001&lang=eng>) or train. The offices of such companies as **Lufthansa** ([www.lufthansa.com](http://www.lufthansa.com)), **Austrian airlines** ([www.aa.com](http://www.aa.com)), **Czech airlines** ([www.czechairlines.com](http://www.czechairlines.com)), **Finnair** ([www.finnair.com](http://www.finnair.com)), **Turkish airlines** ([www.thy.com](http://www.thy.com)), **Air China** ([www.airchina.com](http://www.airchina.com)), **Aeroflot-Russian Airlines** ([www.aeroflot.ru](http://www.aeroflot.ru)), **Transaero** ([www.transaero.ru](http://www.transaero.ru)) and others are located in Koltsovo. Please consult your travel office for exact fares and schedule.

## **Weather in Ekaterinburg**

The average daily temperature in Ekaterinburg is 15,6 deg. Celsius (60,1 deg. Fahrenheit) in June and 17,4 deg. Celsius (63,3 deg. Fahrenheit) in July. Expected daytime temperature can vary between 20 and 30°C. The possibility of rainy weather cannot be excluded.



## **Registration of Participants**

The Symposium participants are invited to register at the Symposium site <http://conference.imp.uran.ru/en/eastmag2010/>. If you have difficulties with on-line registration please contact the Organizing Committee using any type of communication (e-mail, telephone, FAX).

***Deadline for registration is February 15, 2010.***

## **Preparation of Abstracts**

Instruction for preparation of Abstracts will be available at the Symposium site <http://conference.imp.uran.ru/>.

Abstracts must reach the Organizing Committee ***not later than February 15, 2010.***

Receipt of Abstracts by the Organizing Committee will be confirmed by automatic e-mail notification.

At least one author of each presentation must register at the Symposium and pay the Symposium Fee. Each registered participant is entitled to submit one Abstract for publication in the Final Program. One of the authors must give a presentation at EASTMAG-2010. Abstracts for which no payment from any of the co-authors has been received until the deadline will be removed from the program and not printed in the Abstract book program.

## **Symposium Proceedings**

The Invited lectures and materials selected by the Organizing Committee will be published in the “The Physics of Metals and Metallography” journal (ISSN PRINT: 0031-918X, ISSN ONLINE: 1555-6190), <http://www.springer.com/materials/special+types/journal/11508>.

Materials of the Symposium will be published in one of the electronic journal of the Trans Tech Publications Inc. <http://www.ttp.net>, <http://www.scientific.net> and will be available on CD and on-line.