First announcement of the
10th IUVSTA School:

International Summer School on **Physics at Nanoscale**

30th May – 4th June 2011
Devět Skal,
Czech Republic

Program Committee:
H. H. Brongersma, Calipso, Eindhoven, NL
I. Kamiya, Toyota Technological Institute, Nagoya, JP
S. Maier, Imperial College, London, UK
C. Teichert, University Leoben, Austria
P. Varga, Technical University Wien, Austria

Organized by:
International Union for Vacuum Science, Technique and Applications together with

- Czech Nanoteam
- Institute of Physics, Academy of Sciences of the Czech Republic, Prague
- Brno University of Technology
- Masaryk University, Brno
- CEITEC
- Charles University, Prague
- J.E. Purkynje University, Usti nad Labem
- Czech Technical University, Prague
- Czech Physical Society
- Czech Vacuum Society

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We would like to invite you to the International Summer School to be held in the Czech Republic from 30th May to 4th June 2011. The school is a continuation of the traditional and highly successful series of summer schools on physics of thin films and surfaces held every three years in the Czech Republic. Last school in 2008 brought together 136 participants from 19 countries.

The coming school will be devoted to the rapidly expanding field of "Physics at Nanoscale". Invited speakers from leading world laboratories will present the latest progress in the research fields concentrated to nanoscale, in particular

- Nanostructures, Surfaces and Thin Films
- Nano-Optics and Photonics
- Nanoelectronics and Spintronics
- Nanostructured Solar Cells.

The school is intended for young people, mainly PhD students and young researchers from both academia and companies.

Participants are invited to present their research interests and results during a poster session. A certificate of participation will be issued for recognition of the school attendance by universities.

Traditionally, the school will take place at Devět Skal in the relaxing environment of a small recreation resort hidden in the forests at the Czech-Moravian highlands, half way between Prague and Brno. The resort offers an ideal environment both for discussing science as well as relaxing afterwards.

We are looking forward to seeing you in Devět Skal !

Organizing committee:

in Brno:
T. Šikola, L. Dittrichová, J. Humlíček, J. Spousta

in Prague:
A. Fejfar, K. Mašek, P. Hedbávný, V. Matolín

Antonín Fejfar
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Preliminary program of the school:

Klaus Kern, Max Planck Institute, Stuttgart, Germany
►**Physics at Nanoscale (preliminary title)**

Walter Riess, IBM Zurich, Switzerland
►**The Future of Nanoelectronics**

Klaus Wandelt, Bonn University, Germany
►**Surface Science of Metal/Electrolyte Interfaces**

Franz Giessibl, Regensburg University, Germany
►**Study of surfaces by atomically resolved AFM**

Pavel Jelínek, AS CR, Prague, Czech Republic
► **Exploring Nano: what can we learn/expect from theoretical studies?**

Hong-jun Gao, Chinese Academy of Sciences, Beijing
►**Nanoscale electronic devices**

Christian Teichert, Montan University Leoben, Austria
►**Nanostructure characterization by AFM**
►**Electrical characterization by conductive AFM**

Thomas Cornelius, ESRF, Grenoble
►**Mechanical behavior of single nanostructures**

Oliver Fruchart, Institut Néel, Grenoble, France
►**A short dive into nanomagnetism and spin electronics**

Javier Aizpurua, CSIC, San Sebastian, Spain
►**Plasmonic antennas for field-enhanced spectroscopy and microscopy**

Michael Londesborough, ASCR, Řež, Czech Rep.
►**Energy – its role and resources**

Ivan Gordon, IMEC, Belgium
►**Thin film solar cell research: where nanotechnology meets photovoltaics**

Jens Schneider, CSG Solar, Thalheim, Germany
► **"Reality is a bitch" - from lab to production**
► **Crystalline Silicon on Glass - a unique challenge for thin film PV**

Lars Montelius, Lund University, Sweden
► **Nanowires for life science applications**

The school program aims at presenting current directions of research at both tutorial as well as state-of-the-art level. The fields are represented by eminent scientists in the fields of surface science, interfaces and nano-structures, nanomechanics, nano-photonics and spin electronics. The school also connects the areas of fundamental research to the vital areas of technology: nano-electronics, renewable energy and life science applications.

For further information about the school please send an e-mail to **iss@fzu.cz** or look at the web page **www.fzu.cz/~iss** or contact directly the organizers:

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Preregistration form

(please return by April 15th, 2011)

International Summer School "Physics at Nanoscale"

30th May -4th June 2011, Devět Skal, Czech Republic

Prof. Dr. Mr. Ms. (Please check)

Name : .....

Institution : .....

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Date: Signature: