



PhD Conference of the Doctoral School for Physics

Faculty of Natural Sciences

Budapest University of Technology and Economics,

The conference is organized in the framework of *TÁMOP-4.2.2/B-10/1-2010-0009*

Friday, 22 June 2012

PROGRAM

Plenary session

Room: F. building F29

Chairman: Dr. Cs. Sükösd

- 9:00 Opening (*Cs. Sükösd*, TÁMOP coordinator of the Faculty of Sciences)
- 9:05 Atmospheric interface design for mass spectrometry
(*T. Majoros*, Department. of Atomic Physics)
- 9:30 The connection between tightly focused beams and the concentration problem on the sphere (*K. Jahn*, Department of Physics)
- 9:55 Theoretical study of magnetic domain walls through a cobalt nanocontact
(*L. Balogh*, Department of Theoretical Physics)
- 10:20 Magnetic perturbation induced transport in fusion plasmas
(*G. Papp*, Institute of Nuclear Techniques)
- 10:45 Global superfluid and magnetic phase diagram of a three-component fermion mixture (*M. Kanász-Nagy*, Department of Theoretical Physics)

Session A (Atomic Physics)

Room: F building F29

Chairman: Prof. P. Richter

- 13:00 Surface analytical investigation of Ti maxillofacial miniplates retrieved from the human body (*B. Sebők*, Department. of Atomic Physics)
- 13:25 Polarized light extraction from light emitting diodes by means of metallic nanostructures (*Ö. Sepsi*, Department of Atomic Physics)
- 13:50 Nanocrystal solar cells and impact ionization in silicon nanocrystals (*M. Vörös*, Department of Atomic Physics).
- 14:15 Measuring method for the examination of the polarization properties of low-birefringence optical materials (*B. Játékos*, Department of Atomic Physics)

Session B (Nuclear Techniques)

Room: R. building R214

Chairman: Dr. G. Pokol

- 13:00 Micro-XRF studies on biological samples using synchrotron radiation (*A. Gerényi*, Institute of Nuclear Techniques)
- 13:25 Beam Emission Spectroscopy Measurements on KSTAR (*M. Lampert*, Institute of Nuclear Techniques)
- 13:50 Photon FASTCAM SA5 camera control software development for fusion plasma measurements (*G. Náfrádi*, Institute of Nuclear Techniques)
- 14:15 Development of an enhanced atomic beam diagnostic for the COMPASS tokamak (*Cs. Buday*, Institute of Nuclear Techniques)