HED at FAIR Annual Meeting

Third draft program (07.09.2018)

Wednesday, October 3rd *(Edificio Politécnico, Salón de Grados)*

8:45–9:15 Registration
9:15–9:30 Welcome address (R. Piriz)

9:30–11:00 Introduction Session – Chair: V. Bagnoud

- ***International project of the Facility for Antiproton and Ion Research in Europe (FAIR) (25' + 5')***
  - Alexander Golubev, NRC "Kurchatov institute" - ITEP Russia
- ***Experimental facilities for HED and WDM experiments at FAIR (25' + 5')***
  - Stephan Neff, GSI/FAIR Germany
- ***tba (25' + 5')***
  - Paul Neumayer, GSI Germany

11:00–11:30 Coffee Break

11:30–13:30 Science at HED facilities– Chair: A. R. Piriz

- ***Planetary Physics Research Program at the facility for Antiprotons and Ion Research at Darmstadt***
  - Naeem Ahmad Tahir, GSI Germany
- ***Intense, pulsed ion beams for high energy density science and materials research (25' + 5')***
  - Thomas Schenkel, Lawrence Berkeley National Laboratory, USA
- ***Heavy ion beam – plasma interaction research at IMP (25' + 5')***
  - Rui, Cheng, Institute of Modern Physics, China
- ***ITEP's activity at HED@FAIR collaboration (25' + 5')***
  - Alexey Kantsyrev, ITEP Russia

13:30–15:00 Lunch Break

15:00–17:00 PRIOR – Chair: D. Varentsov

- ***The PRIOR facility (25' + 5')***
  - Karin Weyrich
- ***Development of ion-optical schemes of proton microscopes (15' + 5')***
  - A. V. Bogdanov, ITEP NRC "Kurchatov institute"
- ***The full-scale Monte-Carlo simulation of experiments at PRIOR-II (15' + 5')***
  - A. V. Skobliakov, ITEP NRC "Kurchatov institute"
- ***Reconstruction of a proton radiography images (15' + 5')***
  - D. S. Kolesnikov, ITEP NRC "Kurchatov institute"
- ***Tomographic reconstruction at proton radiography (15'+5')***
  - V. A. Panyushkin, ITEP NRC "Kurchatov institute"

17:00–17:30 Coffee break

17:30–19:00 Technical Infrastructure Phase – Chair: P. Neumayer

- ***Target Chamber for Plasma Physics Experiments at FAIR (25' + 5')***
  - Andreas Tauschwitz, GSI
- ***ChASSIS - Data Acquisition and Control System for HHT and HED@FAIR Experiments (25' + 5')***
  - Dmitry Varentsov, GSI
- ***A High-Energy Laser Beamline – from PHELIX to the HHT-cave at GSI (25' + 5')***
  - Zsuzsanna Major, GSI

21:00–23:00 Dinner *(Hotel Doña Carlota)*

Thursday, October 4th *(Edificio Politécnico)*

9:00–11:05 HIHEX Diagnostics – Chair: K. Schoenberg

- ***Conductivity and Reflectivity Measurements at High Dynamic Pressures (20' + 5')***
  - Victor Mintsev, IPCP RAS, Russia
- ***Application of X-ray Imaging Techniques for HIHEX Experiments (20' + 5')***
  - Olga Rosmej, GSI
- ***HED experiments at SIS-18: the review of setups and diagnostics (20' + 5')***
  - Dmitry Nikolaev, IPCP Russia
- ***Progress towards first day experiment diagnostics at FAIR (20' + 5')***
  - Markus Roth, TU Darmstadt Germany
- ***Optical diagnostics in shock wave and WDM experiments (20' + 5')***
  - Konstantin Gubskiy, National Research Nuclear University MEPhI

11:05–11:30 Coffee Break

11:30–13:00 Panel discussion on Diagnostics – Chair: O. Rosmej

13:00–15:00 Lunch Break

15:00–16:00 Business Meeting *(Instituto de Investigaciones Energéticas-INEI)*

16:00–18:00 Poster session *(Instituto de Investigaciones Energéticas-INEI)*

18:00 Transfer to Almagro town and Conference Dinner

Friday, October 5th *(Edificio Politécnico)*

9:00–11:05 Theory, modelling and simulation – Chair: N. A. Tahir

- ***From solids to warm dense matter: modeling nonequilibrium kinetics in matter irradiated with x-rays or ions (20' + 5')***
  - Nikita Medvedev, Institute of Physics, Czech Academy of Sciences, Czech
- ***Supression threshold for the Rayleigh-Taylor instability in accelerated elastic-solid slabs (20' + 5')***
  - Sofía Piriz, Universidad Castilla La Mancha, Spain
- ***Analysis of theory-related uncertainties in stopping power measurements near the Bragg peak (20' + 5')***
  - Piotr Raczka, Institute of Plasma Physics and Laser Microfusion, Poland
- ***Richtmyer-Meshkov Instability: comparison between Linear Theory, Hydrodynamic Simulations and Vortex Sheet Model (20' + 5')***
  - Francisco Cobos-Campos, Universidad Castilla La Mancha, Spain
- ***Stopping and transportation of ion beam in plasma (20' + 5')***
  - Jieru Ren, Xi'an Jiaotong University, China

11:05–11:30 Coffee Break

11:30–13:10 Laser Plasma Interactions – Chair: N. Andreev

- ***Density jump as a function of magnetic field strength for parallel collisionless shocks in pair plasmas (20' + 5')***
  - Antoine Bret, Universidad Castilla La Mancha, Spain
- ***Time and space-resolved thermometry using neutron resonance spectroscopy: requirements and prospects for laser-driven neutron soures (20' + 5')***
  - Juan Fernandez, Los Alamos National Laboratory, USA
- ***High energy electrons in the interaction of relativistic laser pulses with near critical plasma (20' + 5')***
  - Nikolay Andreev, JIHT RAS
- ***Particle-in-cell simulations of intense laser-solid interactions (20' + 5')***
  - Dong Wu, Shanghai Institute of Optics and Fine Mechanics, China

13:00 Conclusion and Remarks