Photos from the Meeting and excursion to FLNR

PROGRAMME
Meeting of the RAS Council on Heavy-Ion Physics

Friday, 1 December 2017
International Conference Hall, Dubna

9:30

I. Topics and results of previous meetings 9:30-9:40  
I. Isosimov 10’

II. Nuclei structure as a key issue of the physics of atomic nuclei

Investigations of nuclei far away from the β-stability line as one of three FLNR fields of research. Introduction. 9:40-10:00  
Yu. Oganessian 20’

III. Synthesis, properties and interaction of nuclei far away from the stability line

1. Investigations into physics of exotic nuclei in laboratories worldwide.  
Marek Lewitowicz (GANIL) 10:00-10:30 25’+5’

2. Research in frame of the Seven-Year Plan of FLNR, JINR. The expected results.  
G. Ter-Akopian 10:30-10:50 15’+5’

S. Krupko / A. Yukhimchuk (All-Russian Scientific Research Institute of Experimental Physics) 10:50-11:20 25’+5’

Coffee break 11:20-11:40 20’

b) Reconstruction and upgrade of the U-400M cyclotron. The energy and intensity increase of the primary beam. U-400M operating modes. Systems of the ion beam extraction to the production target.  
11:40-12:05  
G. Gulbekian 20’+5’

c) The 14-GHz and 18-GHz ECR sources of multicharged ions developed at FLNR, JINR. Design and development of 28 GHz ECR source.  
12:05-12:20  
S. Bogomolov 10’+5’

d) Active gas catcher: an interface transforming the flux of radioactive nuclei stopped in gas into a high-quality beam with the energy of 30-50 keV. Prospects for the development of the facility in frame of the Seven-Year Plan. Contributions of collaborators.  
12:20-12:45  
Christoph Schiedenberger (GSI) 20’+5’
Lunch break 12:50 – 14:00

**Key acceleration technologies in heavy-ion physics.**

14:00-14:30  G. Trubnikov 25’ +5’

**IV. Objectives of a new Seven-Year Plan** 14:30-14:45  Yu. Oganessian 15’

a) Prospects for the investigation of exotic nuclei structure and nuclear reactions using high precision beams of radioactive ions.

14:45-15:15  A. Fomichev 25’ +5’

b) Development of an efficient linear accelerator for production of high-quality radioactive nuclei beams of variable energy.

15:15-15:45  S. Polozov (Moscow Engineering Physics Institute) / T. Kulevoy (NRC KI - Institute of Theoretical and Experimental Physics) 25’ +5’

Coffee break 15:45-16:05 20’

**V. Setting course for new horizons.** 16:05 -16:25  Yu. Oganessian 20’

a) **Electron-Ion Collider. Scientific programme. Keys aspects.**

16:25-16:45  L. Grigorenko 15’ +5’

b) **The use of an electron-ion collider for nuclear structure studies.**

16:45-17:05  Haik Simon (GSI) 15’ +5’

c) **Possible physics program at a low-energy storage ring.**

17:05 PM-17:25  Yuri Litvinov (GSI) 15’ +5’

d) **Project review on electron-ion collider for FAIR.**

17:25-17:45  P. Shatunov (Budker Institute of Nuclear Physics) 15’ +5’

e) **The electron-ion collider using crystalline ion beams.**

17:45-18:05  I. Meshkov 15’ +5’

Discussion on possible development of a high-luminosity electron-ion collider.

18:05-18:30  E. Levichev, V. Parkhomchuk, I. Meshkov,

Yu. Shatunov and others. 25’

Moderator  B. Sharkov.

RECEPTION (18:30 – 21:00)