

**Стендовая сессия “А” (вторник, 5 октября 2004)**  
**Poster session “А” (Tuesday, October 5, 2004)**

**I. Accelerating structures and powerful electronics**

| <b>Last_Name</b>      | <b>Affiliation</b>                     | <b>Title</b>   |
|-----------------------|--|--|
| 1. Arbuzov V. S.      | BINP SB RAS                            | Статус высокочастотной ускоряющей системы микротрона - рекуператора для лазера на свободных электронах |
| 2. Bomko V.A.         | NSC KIPT, Kharkov                      | Adjusting the cells of the ion linear accelerator with focusing RF quadrupole units                    |
| 3. Hudak M.           | JINR                                   | High-frequency system of a cyclotron DC-72   |
| 4. Kaminsky V.I.      | MEPhI                                  | Calculation of multipactor discharge at input coupler for superconducting cavity                       |
| 5. Kendjebulatov E.K. | BINP SB RAS                            | 172.09 MHz RF system for VEPP-2000 collider.   |
| 6. Kuznetsov G.V.     | SFTI                                   | The Voltage Stabilization on a Shaping Line of the Anode Modulator of the Proton Linac SFTI.           |
| 7. Osipov V.N.        | BINP SB RAS                            | RF System for the Industrial Linear Electron Accelerator at KAERI (Korea, Daejeon)                     |
| 8. Popov A.M.         | BINP SB RAS                            | Accelerating RF Station for HIRFL-CSR, Lanzhou, China  |
| 9. Sidorov G.I.       | JINR                                   | RF-system of the linear accelerator LUE-200 of project IREN  |
| 10. Yakovlev V.P.     | Omega-P, Inc., USA                     | Ferroelectric elements for high-power pulse compression systems  |
| 11. Zavodov V.P.      | ITEP                                   | Synchronization of ion beam transfer from synchrotron into accumulator in the ITEP-TWAC facility       |
| 12. Сумбаев А.П.      | SLAC, USA                              | A topology of solid state MARX modulator with the load and switch protection                           |
| 13. Kvasha A.I.       | INR, Moscow (Troitsk?)                 | New driver for the powerful output RF amplifier of MMF DTL RF system                                   |
| 14. Dolgov A.M.       | TIRA Corporation Ltd.), St. Petersburg | The new generation HV pulse modulator for technological accelerators                                   |
| 15. Kuzikov S.        | IAP RAS                                | Quasi-Optical Components of Future Electron-Positron Linear Colliders                                  |
| 16. Sadovoy G.S.      | NSTU                                   | The project of high power UHF generator  |

**II. Ion sources, electron guns, Injectors**

| <b>Last_Name</b>   | <b>Affiliation</b> | <b>Title</b>  |
|--------------------|--------------------|---|
| 1. Aleksandrov V.  | JINR               | Simulation of Dependence of Beam Intensity on Plasma Electrode Position for RIKEN 18 GHz ECRIS            |
| 2. Chachakov A.F.  | SFTI               | Hydrogen Ion Source with a Cold Magnetron Cathode and Magnetic Plasma Compression                         |
| 3. Frolov B.A.     | IHEP, Protvino     | Calculation of Extraction Optics for Ion System with Plasma Emitter                                       |
| 4. Kapin V.V.      | MEPhI              | Charging a Spherical High-Voltage Terminal by Particle Beam   |
| 5. Leporis M.      | JINR               | The new ion source DECRIS-4 for the second phase of DRIBs project.  |
| 6. Petrov V.V.     | BINP SB RAS        | Multy-beam electron gun for ELIT-3A   |
| 7. Reshetnyak N.G. | NSC KIPT, Kharkov  | Investigation of azimuthal electron beam homogeneity in a magnetron gun with a secondary-emission cathode |

|     | <b>Last_Name</b> | <b>Affiliation</b>                            | <b>Title</b>  |
|-----|------------------|---|---|
| 8.  | Shendrik V.      | NSC KIPT,<br>Kharkov                          | On possibilities of formation of picosecond electron bunches in the linear accelerator by means of an optical deflector |
| 9.  | Shishov Yu.A.    | JINR  | Superconducting magnet with cryocooler for the source of ions DECRIS-SC   |
| 10. | Shvets V.A.      | JINR  | The Electron Gun for LUE-200 (project IREN  |
| 11. | Zakutin V.       | NSC KIPT,<br>Kharkov                          | Modes of electron beam generation in a magnetron gun with a secondary-emission cathode                                  |
| 12. | Zorin V.G.       | Institute of Applied Physics, Nizhny Novgorod | ECR ion source with pumping by high frequency gyrotrons.  |
| 13. | Narits A.A.      | Lebedev Physical Institute                    | Charge Exchange between Highly Charged Ions ( $Z > 80$ ) and Ions of Medium Charge ( $q = 10 - 15$ )                    |
| 14. | Perezhogin S.A.  | NSC KIPT,<br>Kharkov                          | Investigation of beam characteristics in the electron injector based on a resonance system with evanescent oscillations |
| 15. | Yakushev V.P.    | INR, Moscow (Troitsk)                         | MMF Linac Proton Injector Modernization   |
| 16. | Yakovenko S.L.   | JINR  | Positron source for the LEPTA injector  |
| 17. | Donets E.E.      | JINR  | Heavy Ion Injections into Synchrotrons, Based on Electron String Ion Sources  |
| 18. | Larionov A.V.    | Lebedev Physical Institute                    | Optical system of the powerful multiple beam L-band klystron for Linear collider  |

### III. Accelerators for medical and industrial purposes

|     | <b>Last_Name</b> | <b>Affiliation</b>                     | <b>Title</b>  |
|-----|------------------|--|---|
| 1.  | Dyachenko V.M.   | JINR                                   | Neutron yield in the extended targets   |
| 2.  | Bazhal S.V.      | SSC RF IPPE,<br>Obninsk                | An Accelerator Tube of the KG-2,5 Cascade Generator Upgrading to Be Used as a Neutron Source for Medical Application                        |
| 3.  | Kapin V.V.       | MEPhI                                  | Effects of field distortions in IH-APF linac  |
| 4.  | Kats M.M.        | ITEP                                   | Possibilities of using laser acceleration in medical aims   |
| 5.  | Sorokin I.N.     | BINP SB RAS                            | The gas charge-exchange target of an electrostatic tandem accelerator with vacuum isolation.  |
| 6.  | Tarnetsky V.V.   | BINP SB RAS                            | 5 MeV 300 kW electron accelerator project   |
| 7.  | Vorozhtsov S.B.  | JINR                                   | Dynamical Properties of the Electromagnetic Field of the Customs Cyclotron  |
| 8.  | Vorozhtsov A.S.  | JINR                                   | Magnetic Field Simulation in the Customs Cyclotron  |
| 9.  | Strokach A.P.    | NIIEFA,<br>St.Petersburg               | Applied low energy cyclotron  |
| 10. | Takada E.        | NIRS, Chiba,<br>JAPAN                  | Cancer therapy by ion beam - operational experience of HIMAC  |
| 11. | Petrenko V.V.    | RRC "Kurchatov<br>Institute            | Strengthening of polymeric materials for orthopaedic stomatology by electron beam treatment   |
| 12. | Krainov G.S.     | BINP SB RAS                            | Compact 500 kV tandem accelerator on the base of high frequency rectifier and gas-filled feedthrough insulator                              |
| 13. | Fialkovsky A.M.  | NIIEFA - NPK<br>LUTS,<br>St.Petersburg | Detector System Updating to Improve Resolution of Industrial Introsopes and Tomographs Based on 6-15 MeV Accelerators                       |
| 14. | Mal'tsev A.A.    | LHE JINR                               | Infrared Synchrotron Diagnostic of JINR as a new perspective direction in the physics and technology of accelerator and applied experiments |
| 15. | Shvedunov V.I.   | Scobel'syn Inst.<br>of Nucl. Phys.,    | Design of the miniature electron accelerator dedicated to intraoperational radiation therapy  |

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|     |                 | MSU                           |   |
| 16. | Solnyshkov D.A. | NII-EFA                       | The neutron generator NG-12-2   |
| 17. | Papash O.I.     | ACCEL Instr.<br>GMBH, Germany | On commercial cyclotron of intense Proton beam of 30 MeV energy range |

#### IV. Radiation problems in accelerators

|    | <b>Last_Name</b> | <b>Affiliation</b> | <b>Title</b>   |
|----|------------------|--------------------|--|
| 1. | Alexeev A.G.     | IHEP, Protvino     | Radiation monitoring system for TNK  |
| 2. | Degtyarev I.     | IHEP, Protvino     | Simulation of relativistic hadronic interactions in the framework of the RTS&T-2004 code   |
| 3. | Peleshko V.N.    | IHEP, Protvino     | Application of the RSU-01 radiometer-dosimeter for estimation of spectra and dose characteristics of neutron radiation                       |
| 4. |                  |                    | The automated system of the radiation control of INR linear accelerator (Troitsk).   |
| 5. | Pikalov V.A.     | IHEP, Protvino     | Neutron detector based on boron containing plastic scintillator.   |
| 6. | Schegolev V.Yu.  | JINR               | Radiation Hardness of Permanent Magnets of NdFeB in High Energy Neutrons Field   |
| 7. | Zaitsev L.N.     | JINR               | Study of Energy Deposition into the NbTi-cable Superconducting Dipoles for the SIS-100   |
| 8. | Sarin V.A.       | INR, Troitsk       | Radiation changes in structure of diamond single crystals irradiated by neutrons and annealed. Neutron and x-ray diffraction investigations. |
| 9. | Tomashevich P.V. | NII-EFA            | Problem of exciting active mixture of high-aperture high-pressure CO <sub>2</sub> -lasers  |

#### V. Heavy ion accelerators

|     | <b>Last_Name</b> | <b>Affiliation</b>      | <b>Title</b>  |
|-----|------------------|-------------------------|---|
| 1.  | Leonov V.V.      | RNC Kurchatov Institute | Measurement of KSRS lifetime by the decay rate plot method                                      |
| 2.  | Matveenko A.N.   | BINP SB RAS             | Isochronous bend for high gain ring FEL   |
| 3.  | Mitrochenko V.V. | NSC KIPT, Kharkov       | Wakefield undulator for generating X-rays   |
| 4.  | Ostreiko G.N.    | BINP SB RAS             | Commissioning of the linear accelerator-injector of TNK facility.                               |
| 5.  |                  |                         | Waveguide channel for TNK linear accelerator – injector   |
| 6.  | Shevchenko O.A.  | BINP SB RAS             | Numerical modeling of the Novosibirsk Terahertz FEL and comparison with experimental results.   |
| 7.  | Valentinov A.G.  | RNC Kurchatov Institute | COD Measuring And Correction at SIBERIA-2   |
| 8.  |                  |                         | Local Feedback System to Correct Synchrotron Radiation Beam Position at SIBERIA-2 Storage Ring. |
| 9.  | Yarovoi T.V.     | RNC Kurchatov Institute | Non conventional schemes of accelerator electron beam microbunching by laser beam               |
| 10. | Kulevoy T.V.     | ITEP                    | Status of heavy ion linac TIPr-1  |