

# Scientific Program

time schedule and oral talks

version September 20, 2018

<b>October 01, 2018, Monday</b>			
During day	<b>Arrival</b>		
14:00-15:00	<b>Lunch</b>		
15:00 – 16:00	<b>Registration</b>		
16:00 – 16:30	<p style="text-align: center;"><b>Opening session</b> <i>S. Ivanov, I. Meshkov</i></p>		
16:30 – 17:10 40 min	<b>V. Petrov (NRC KI - IHEP, Protvino)</b>	<b>Current problems in particle physics for future machines</b>	
17:10 – 18:40	<b>Session 2.1. Colliders</b> <i>Chairman Secretary</i>		
17:10 – 17:40 30 min	<b>M. Zobov (INFN/LNF, Frascati, Italy)</b>	<b>DAFNE Collider with Crab Waist Scheme: from KLOE-2 to SIDDHARTA-2 Experiment</b>	<b>MOXMH01</b>
17:40 – 18:10 30 min	<b>Yu. Shatunov (BINP SB RAS, NSU, Novosibirsk)</b>	<b>VEPP-2000 Collider Operation in Full Energy Range With New Injector</b>	<b>MOXMH02</b>
18:10 – 18:40 30 min	<b>E. Syresin (JINR, Dubna)</b>	<b>Status of Accelerator Complex NICA</b>	<b>MOXMH03</b>
18:40 – 19:10	<b>Session 1.0. Modern trends in accelerators</b> <i>Chairman Secretary</i>		
18:40 – 19:10	<b>M. Lalayan (MEPhI, Moscow)</b>	<b>Current Results of the 4th Generation Light Source USSR (Former SSRS4) Development</b>	<b>MOXMH04, THPSC02</b>
19:30 – 21:30	<b>Welcome Party</b>		

## October 02, 2018, Tuesday

9:00 – 10:30	<b>Session 1.1. Modern trends in accelerators</b>		
	<i>Chairman</i>		<i>Secretary</i>
9:00 – 9:30    30 min	<b>N. Zavyalov (VNIIEF, Sarov)</b>	<b>Charged-Particle Accelerators Progress and Prospects at RFNC-VNIIEF</b>	<b>TUXMH01</b>
9:30 – 10:00    30 min	<b>V. Korchuganov (NRC KI, Moscow)</b>	<b>The Main Problems and Its Solutions in Modern SR Sources</b>	<b>TUXMH02</b>
10:00 – 10:30    30 min	<b>B. Sharkov (JINR, Dubna)</b>	<b>Accelerator and Storage Ring Facility for Radioactive Ion Beam Physics - DERICA Project</b>	<b>TUXMH03</b>
10:30-10:50			
10:50 – 11:10	<b>Session 1.2. Modern trends in accelerators</b>		
	<i>Chairman</i>		<i>Secretary</i>
10:50 – 11:10    20 min	<b>K. Lotov (BINP SB RAS, Novosibirsk)</b>	<b>Proton Beam Self-Modulation and Electron Acceleration in AWAKE Experiment</b>	<b>TUCAMH01</b>
11:10 – 12:30	<b>Session 3.1. Particle dynamics in accelerators and storage rings, cooling methods, new methods of acceleration</b>		
	<i>Chairman</i>		<i>Secretary</i>
11:10 – 11:40    30 min	<b>A. Afonin (NRC KI - IHEP, Protvino)</b>	<b>Recent study and use crystal deflectors in U-70 accelerator of IHEP - status and prospects.</b>	<b>TUYMH01</b>
11:40 – 12:10    30 min	<b>N. Vinokurov (BINP SB RAS, Novosibirsk)</b>	<b>Four-Beam Compensation With Two Beams</b>	<b>TUYMH02</b>
12:10 – 12:30    20 min	<b>I. Meshkov (JINR, Dubna)</b>	<b>Optimum Luminosity of Proton-Ion Collider</b>	<b>TUCBMH01</b>
12:30-14:00	<b>Lunch</b>		
14:00 – 15:00	<b>Session 3.2. Particle dynamics in accelerators and storage rings, cooling methods, new methods of acceleration</b>		
	<i>Chairman</i>		<i>Secretary</i>
14:00 – 14:20    20 min	<b>M. Bryzgunov (BINP SB RAS, Novosibirsk)</b>	<b>Status of the 2.5 MeV electron cooling system for NICA collider</b>	<b>TUCBMH02</b>
14:20 – 14:40    20 min	<b>A. Ovsyannikov (St. Petersburg State University, St. Petersburg)</b>	<b>Numerical Analysis of Single Particle Dynamics in PMS Trap with Oscillating Dipole Field</b>	<b>TUCBMH03</b>
14:40 – 15:00    20 min	<b>E. Svystun (DESY, Hamburg, Germany)</b>	<b>Optimization of Electron Beam Quality in a Laser-Driven Plasma Accelerator with External Injection at SINBAD for ATHENAe</b>	<b>TUCBMH04</b>
15:00 – 16:00	<b>Session 2.1. Colliders</b>		
	<i>Chairman</i>		<i>Secretary</i>
15:00 – 15:30    30 min	<b>P. Piminov (BINP SB RAS, Novosibirsk)</b>	<b>Start VEPP-4M Facility Operation at High Energy</b>	<b>TUZMH01</b>
15:30 – 16:00    30 min	<b>Yu. Maltseva (BINP SB RAS, Novosibirsk)</b>	<b>VEPP-5 Injection Complex: New Possibilities for BINP Electron-Positron Colliders</b>	<b>TUZMH02</b>
16:00 – 16:20			
16:20 – 16:40	<b>Session 5. Heavy ion accelerators (Beam Transfer Channels)</b>		
	<i>Chairman</i>		<i>Secretary</i>
16:20 – 16:40    20 min	<b>A. Tuzikov (JINR, Dubna)</b>	<b>Heavy Ion Injection Chain of NICA Collider</b>	<b>TUCDMH01</b>
16:40 – 17:10	<b>Session 10.1. Control and diagnostic systems</b>		
	<i>Chairman</i>		<i>Secretary</i>
16:40 – 17:10    30 min	<b>V. Grishin (ESS, Lund)</b>	<b>A Family of Gas Ionization Chambers and SEM for Beam Loss Monitoring of LHC and Other Accelerators</b>	<b>TUZMH03</b>
17:10 – 19:00	<b>Poster session A</b>		

## October 03, 2018, Wednesday

October 03, 2018, Wednesday			
9:00 – 10:30		<b>Session 4.1. High intensity cyclic and linear accelerators</b>	
		<i>Chairman</i>	<i>Secretary</i>
9:00 – 9:30	30 min	<b>S. Ivanov (NRC KI - IHEP, Protvino)</b>	<b>Status of U-70</b>
9:30 – 10:00	30 min	<b>I. Kalagin (JINR, Dubna)</b>	<b>Heavy Ion Cyclotrons of FLNR JINR - Status and Plans</b>
10:00 – 10:30	30 min	<b>E. Ivanov (NRC KI - PNPI, Gatchina)</b>	<b>The Status of the Accelerator Complex NRC KI – PNPI</b>
			
10:30-10:50		<b>Session 4.2. High intensity cyclic and linear accelerators</b>	
		<i>Chairman</i>	<i>Secretary</i>
10:50 – 11:10	20 min	H. Hoeltermann (BEVATECH, Frankfurt, Germany)	Light Ion Linear Accelerator up to 7 AMeV for NICA
11:10 – 11:30	20 min	T. Kulevoy (NRC KI - ITEP, Moscow; MEPHI, Moscow)	Ion Accelerators for Russian Mega-Science Projects
11:30 – 11:50	20 min	S. Polozov (MEPHI, Moscow)	Superconducting Linacs Development for Current and Future Russian Accelerator Projects: Progress and Problems
11:50 – 12:10	20 min	G. Kropachev (NRC KI - ITEP, Moscow)	Normally conducting linacs in Russian accelerator projects
12:10 – 12:30	20 min	A. Telnov (VNIIEF, Sarov)	Status Report of Development of High Power Beam CW Electron Accelerator
12:30 – 12:50	20 min	M. Smetanin (VNIIEF, Sarov)	Calculated and Experimental Justifications of Generating High Power Electron Beam on a CW Resonance Accelerator
<b>Lunch</b>			
12:50-14:00		<b>Session 4.3. High intensity cyclic and linear accelerators</b>	
		<i>Chairman</i>	<i>Secretary</i>
14:00 – 14:20	20 min	A. Martynov (JINR, Dubna)	Status of the Nuclotron injection complex
14:20-16:10		<b>Session 8. Superconducting accelerators and cryogenic technology</b>	
		<i>Chairman</i>	<i>Secretary</i>
14:20 – 14:50	30 min	<b>E.Fischer (FAIR, Germany)</b>	<b>Current Status of the Superconducting Magnet Production for the SIS100 Accelerator within the FAIR Project</b>
14:50 – 15:10	20 min	V. Borisov (JINR, Dubna)	Magnetic Measurements of NICA Booster and Collider Magnets
15:10 – 15:30	20 min	L. Tkachenko (NRC KI - IHEP, Protvino)	Development of HED@FAIR quadrupole
15:30 – 15:50	20 min	D. Nikiforov (JINR, Dubna)	Superconducting Magnets for NICA Project
			
16:10 – 17:20		<b>Session 6.1. Synchrotron radiation sources and free electron lasers</b>	
		<i>Chairman</i>	<i>Secretary</i>
16:10 – 16:40	30 min	<b>A. Valentinov (NRC KI, Moscow)</b>	<b>Status of the Kurchatov Synchrotron Radiation Source</b>
16:40 – 17:10	30 min	<b>Ye. Fomin (NRC KI, Moscow)</b>	<b>Kurchatov synchrotron radiation source – from the 2nd to the 4th generation</b>
<b>17:10 – 19:00</b>			
<b>Poster session B</b>			

October 04, 2018, Thursday			
9:00-10:10	<b>Session 6.2. Synchrotron radiation sources and free electron lasers</b>		
	<i>Chairman</i>		<i>Secretary</i>
9:00 – 9:20 20 min	K. Zolotarev (BINP SB RAS, Novosibirsk)	Siberian Circular Photons Source "SKIF". Project review.	THCAMH01
9:20 – 9:40 30 min	S. Tzenov (IFIN-HH, Bucharest – Magurele)	Soliton and Shock Waves in Free and Magnetized Quasi-neutral Laser Induced Plasmas	THCAMH02
9:40 – 10:10 30 min	<b>V. Shkaruba (BINP SB RAS, Novosibirsk)</b>	<b>Status of Development of Superconducting Insertion Devices for Generation of Synchrotron Radiation at Budker INP</b>	<b>THXMH01</b>
10:10-10:30			
10:30 – 11:10	<b>Session 9. RF power structures and systems</b>		
	<i>Chairman</i>		<i>Secretary</i>
10:30 – 10:50 20 min	G. Kurkin (BINP SB RAS, Novosibirsk)	New RF system for VEPP-5 Damping Ring	THCDMH05
10:50 – 11:10 20 min	Yu. Paramonov. (TORIY, Moscow)	C-Band High Power Amplifier Klystron developed for Linear Electron Accelerators	THCDMH06
11:10 – 12:30	<b>Session 7. Magnetic and vacuum systems, power supplies</b>		
	<i>Chairman</i>		<i>Secretary</i>
11:10 – 11:30 20 min	S. Artamonov (NRC KI - PNPI, Gatchina)	Magnetic field of the 40-80 MeV H-MINUS cyclotron C-80: experiments and calculations	THCDMH01
11:30 – 11:50 20 min	V. Bochkov (Pulsed Technologies Ltd, Ryazan)	Power Supply Systems of High-Voltage Kickers on the Basis of Thyratrons	THCDMH02
11:50 – 12:10 20 min	A. Smirnov (JINR, Dubna)	Challenges of Obtaining of Ultra-High Vacuum in NICA Project	THCDMH03
12:10 – 12:30 20 min	Marco Bonfadini (MILLAB, Москва)	Review of a new vacuum equipment from Agilent Tech for particle accelerators	THCDMH04
12:30-14:00	<b>Lunch</b>		
14:00 – 14:20	<b>Session 11. Ion sources and electron guns</b>		
	<i>Chairman</i>		<i>Secretary</i>
14:00 – 14:20 20 min	V. Paramonov (INR RAS, Moscow)	Evaluations of Parameters Stability of S-Band RF Gun Cavity Due to Effects of Pulsed RF Heating	THCBMH02
14:20 – 15:20	<b>Session 10.1. Control and diagnostic systems</b>		
	<i>Chairman</i>		<i>Secretary</i>
14:20 – 14:40 20 min	A. Senchenko (BINP SB RAS, Novosibirsk; NSU, Novosibirsk)	TANGO Activities in BINP	THCEMH01
14:40 – 15:00 20 min	G. Fatkin (BINP SB RAS, Novosibirsk)	Modern Digital Synchronization Systems for Large Particle Accelerators	THCEMH02
15:00 – 15:20 20 min	A. Kuzhlev (NIIIEFA, St. Petersburg)	Experience on the Application of Automatic Control Systems for Cyclotrons with Different Energies of Accelerated Particles	THCEMH03
15:20 – 15:40			
15:40-16:50	<b>Session 10.2. Control and diagnostic systems</b>		
	<i>Chairman</i>		<i>Secretary</i>
15:40 – 16:10 30 min	<b>V. Zhabitsky (JINR, Dubna)</b>	<b>Tomographic Reconstruction of the Longitudinal Distribution Function of Ions in Bunches During Acceleration at the Nuclotron</b>	<b>THZMH01</b>
16:10 – 16:30 20 min	Yu. Rogovsky (BINP SB RAS, Novosibirsk)	Current dependence of bunch dimensions in VEPP-2000 collider	THCEMH04
16:30 – 18:30	<b>Poster session C</b>		
19:00—22:30	<b>Conference dinner</b>		

<b>October 05, 2018, Friday</b>			
9:00-11:00	<b>Session 12.1. Medical and industrial applications</b> <i>Chairman</i> <span style="float: right;"><i>Secretary</i></span>		
9:00 – 9:30 30 min	<b>Ch. Morris (LANL, Los Alamos, New Mexico, USA)</b>	<b>Charged Particle Radiography-a new way to look inside of things</b>	<b>FRXMH01</b>
9:30 – 9:50 20 min	Oleg Zyatkov (NRC KI - IHEP, Protvino)	The proton radiography facility at the U-70 Synchrotron	<b>TUPSA39</b>
9:50 – 10:20 30 min	<b>S. Rastigeev (BINP SB RAS, Novosibirsk)</b>	<b>Present status of AMS at BINP</b>	<b>FRXMH02</b>
10:20 – 10:40 20 min	A. Maximov (NRC KI - IHEP, Protvino)	The carbon ion beam extraction scheme from the U-70 Synchrotron for radiobiological researches	FRCAMH01
10:40 – 11:00 20 min	S. Gavrilov (INR RAS, Moscow)	Proton Irradiation Facility at INR RAS Linac	FRCAMH02
11:00 – 11:20			
11:20 – 12:10	<b>Session 12.2. Medical and industrial applications</b> <i>Chairman</i>		
11:20 – 11:50 30 min	<b>A. Bazhan (PhTC LPI RAS, Protvino)</b>	<b>Status of the Proton Therapy Complex Prometheus</b>	<b>FRXMH03</b>
11:50 – 12:10 20 min	A. Chernykh (NRC KI - PNPI, Gatchina)	Radiation Oncology Ophthalmic Center Based on the C-80 Accelerator at the NRC "Kurchatov Institute" – PNPI	FRCAMH03
12:10 - 12:40	<b>Closing session</b> <i>S. Ivanov, I. Meshkov</i>		
12:40-14:00	<b>Lunch</b>		
	<b>Departure</b>		