Version 5, 09.04.2019

Program for Joint US-CERN-Japan-Russia International Accelerator School 2019 Ion Colliders
Dubna, 28 October — 7 November 2019

Time	28.10 Mon	29.10 Tue	30.10 Wed	31.10 Thu	01.10 Fri	02.11 Sat	03.11 Sun	04.11 Mon	05.11 Tue	06.11 Wed	07.11 Thu
9:00 – 9:50	**Arrival day & registration**	Opening talks	*5. Towards nuclear physics in electron-radioactive ion collisions* Leonid Grigorenko (JINR)	*10. Vacuum technologies* Kyo Shibata (KEK)	*9. Superconducting magnets for particles accelerators* Sergey Kostromin (JINR)	**Excursion**	*17. Injection and extraction* Verena Kain (CERN)	*23. Simulation tools: interaction with matter* Anton Lechner / Francesco Cerutti (CERN) They will decide after summer)	*26. Secondary beams and machine protection* Anton Lechner / Francesco Cerutti (CERN)	*25. Trends and prospects of accelerator physics and technology in Russia* Grigory Trubnikov (JINR)	**Departure day**
10:00 – 10:50		*1. Modern challenges in HEP: motivation for high energy ion collision* Evgeni Kolomeitsev (JINR)	*6. Nonlinear dynamics* Kazuhito Ohmi (KEK)	*11. RF-systems* Mikhail Lalayan (MEPhI)	*22. Tools for lattice design* Mark Boland (CLS		*18. Asymmetric beams* John Jowett (CERN)	*Linear imperfections and corrections I* Eliana Gianfelice	Linear Imperfections and corrections II Eliana Gianfelice	*14. Electron cooling* Vladimir Reva (BINP)	
11:00		Coffee					Coffee				
11:30 – 12:20		*30. Recap of transverse particle dynamics* Evgeny Perevedentsev (BINP)	*7. Ion sources* Eugeni E. Donets (JINR)	*12. Beam instrumentation & diagnostics I* Hermann Schmickler (CERN)	*28. Electron clouds* Alexandr Krasnov (BINP)		*19. Luminosity optimization* Igor Meshkov (JINR)	*24. Collimation of nuclear beams* Roderick Bruce (CERN)	*27. Schottky diagnostic* Manfred Wendt (CERN)	*13. Bunched beam stochastic cooling* Markus Steck (GSI)	
12:30		Lunch					Lunch				
14:00 – 14:50		*31. Recap of longitudinal beam dynamics, RF-gymnastics* Elena Shaposhnikova (CERN)	*8. Linacs: RFQ, DTL* Sergei Polosov (MEPhI)	*12. Beam instrumentation & diagnostics II* Hermann Schmickler (CERN)	*16. Collective effects* Yoshihiro Shobuda (JAEA)		*20. Collider luminosity simulation* Dmitry Shatilov (BINP)	**Visit to VBLHEP**	*15. Emittance preservation* Verena Kain (CERN)	*32. Designing a collider. NICA collider — a real life example* Anatoly Sidorin (JINR)	
15:00 – 15:50		*29. Overview of electron-ion colliders projects* Peter Shatunov (BINP))	*2. Performance highlights from the ISR* Jean-Pierre Koutchouk (ex-CERN)	**Free time**	*33. Outlook: accelerator tasks for physics beyond SM* Eugeny Levichev (BINP)		*3. Performance highlights from the RHIC* Mei Bai (GSI)		*4. Performance highlights from the LHC* John Jowett (CERN	Oral presentations by students I	

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Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
16:00		Tea			Tea		Tea		Tea		
16:30 – 17:20		Introduction to Case study	Case study		Case study		Q & A		Case study	Oral presentations by students II	
17:30 – 18:20		Case study	Case study		Case study		Q & A		Case study	Discussion and closing	
18:30	Dinner	**Welcome Party**	Dinner						**Banquet**	Dinner	