## Sunday 24 September, 2017

#### 16.00-18.00 Registration, Splendid Conference & SPA Resort

## Monday 25 September, 2017

08.30-09.30	Registration, Splendid Conference & SPA Resort
9.30-10.00	Welcome from Montenegro officials
	Welcome from Organizing Committee
	Welcome from Sponsors

### Plenary

10.00-10.30	Scientific Program of JINR	MATVEEV Victor
10.30-11.00	Opening welcome from CERN	
11.00-11.30	Status and future of WLCG	SCHULZ Markus
11.30-12.00	Coffee	
12.00-12.30	JINR computing infrastructure	KORENKOV
		Vladimir
12.30-13.00	The Fabric for Frontier Experiments Project at Fermilab:	HERNER Kenneth
	Computing for Experiments	

#### 13.00-14.30 Lunch

14.30-15.00	China Grid and Cloud Computing at IHEP in China	LI Weidong
15.00-15.30	Computing for Large Scale Facilities	SITHOLE Happy
15.30-16.00	Approaching exascale for nuclear physics applications: diverse science requirements and energy constraints drive	WELLS Jack
	new paradigms in HPC	
16.00-16.20	Coffee	
16.20-16.50	Experimental projects dedicated to the research of exotic	SIDORCHUK Sergey
	nuclei in Dubna	
16.50-17.20	The ATLAS Production System Evolution	BORODIN Mikhail
17.20-17.40	ATLAS Trigger and Data Acquisition Upgrade Plans for	DEMERS Sarah
	High Luminosity LHC	
17.40-18.00	Niagara Computers	
18.00-18.20	Jet Infosystems	

20.00	Welcome Party, Splendid Conference & SPA
20.00	Resort

# Tuesday 26 September, 2017

## Plenary EGI and WLCG Evolution

9.00-9.30	EGI	LEGRE Yannick
9.30-10.00	Lightweight Sites in the Worldwide LHC Computing Grid	LITMAATH Maarten
10.00-10.20	Improving site efficiency by integrating storage nodes and batch processing	SCHULZ Markus
10.20-10.40	Combined analysis of storage and CPU resources at CERN	DUELLMANN Dirk
10.40-11.10	WLCG Data Management evolution	
11.10-11.30	Coffee	
11.30-11.50	Federated data storage system prototype for LHC experiments and data intensive science	KIRYANOV Andrey
11.50-12.20	Evolution of tools for WLCG operations	ANDREEVA July
12.20-12.50	Computing Resource Information Catalog: the ATLAS Grid Information system evolution for other communities	ANISENKOV Alexey

#### 13.00-14.30 Lunch

#### **Detector & Nuclear Electronics**

14.30-15.00	An upgraded TOF- $\Delta$ E1- $\Delta$ E2-E (DSSSD) based spectrometer for heavy-element research at the	TSYGANOV Yury
	Dubna Gas-Filled Recoil Separator	
15.00-15.15	Development of the autocalibration system for the	VOINOV Alexey
	DGFRS spectrometer based on the double-sided silicon strip detectors	
15.15-15.30	New particle position determination modules for Double Side Silicon Strip Detector at DGFRS	SCHLATTAUER Leo
15.30-15.45	Radiation Damage Studies of Silicon Photomultipliers in Neutrons Field of IBR-2	AFANASIEV Sergei
15.45-16.00	Neutron generators and DAQ systems for tagged neutron technology	KARETNIKOV Maxim
16.00-16.30	Coffee	
16.30-16.45	Data acquisition systems on neutron spectrometers of the IBR-2 reactor	DROZDOV Vladimir
16.45-17.00	Betatron tune measurement system upgrade at Nuclotron	MONAKHOV Dmitrii
17.00-17.15	First Results of the Radiation Monitoring of the GEM Muon Detectors at CMS	DIMITROV Lubomir.
17.15-17.30	ESIS ions injection, holding and extraction control system	PONKIN Dmitriy
17.30-17.45	Development of the Booster injection prototype	NAZLEV Hristo

# Triggering, Data Acquisition, Control Systems

14.30-14.45	Increasing Bandwidth of Data Acquisition	SHVETCOV Vasilii
	Systems on IBR-2 Reactor Spectrometers in	
	FLNP	
14.45-15.00	Data management and processing system for	AVRORIN Alexander
	Baikal-GVD	
15.00-15.15	Software Implementation of USB 3.0 Stack for	MURASHKEVICH Svetlana
	Upgraded Data Link Interface on IBR-2	
	Reactor Spectrometers in FLNP	
15.15-15.30	Tango software development at JINR. Tango	ELKIN Vladimir
	module for WebSocket connection	
15.30-15.45	LABVIEW based magnetic field mapping	ALEINIKOV Vitali
	system for cyclotron DC-280	
15.45-16.00	Signal synchronization system	SHIRIKOV Ilya
16.00-16.30	Coffee	
16.30-16.45	The software for the internal beam diagnostics	ANDREEV Vasily
	of Nuclotron	

# Wednesday 27 September, 2017

Plenary		
9.00-9.30	INDIGO-DataCloud: Quality of Service in	FUHRMANN Patrick
	storage	
9.30-10.00	High performance computing system in	BELYAEV Nikita
	the framework of the Higgs boson studies	
10.00-10.30	DIRAC services for grid and cloud	TSAREGORODTSEV Andrei
	infrastructures	
10.30-11.00	ALFA: ALICE-FAIR software framework	AL-TURANY Mohammad
11.00-11.30	Coffee	
11.30-12.00	STAR's GRID Production Framework	HAJDU Levente
12.00-12.30	Status of the project NICA at JINR	ROGACHEVSKIY Oleg
12.30-13.00	NICA Computing	DOLBILOV Andrey

13.00-14.30 Lunch

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19.00	<b>CONFERENCE DINNER,</b>
19.00	Splendid Conference & SPA Resort

# Thursday 28 September, 2017

## Plenary

9.00-9.30	Modern SQL and NoSQL database	BARBERIS Dario
	technologies for the ATLAS experiment	
9.30-10.00	The Phase-II upgrade of ATLAS	TARTARELLI Francesco
	Calorimeter	
10.00-10.30	The Trigger Readout Electronics for the	WOLFF Robert
	Phase-1 Upgrade of the ATLAS Liquid-	
	Argon Calorimeters	
10.30-11.00	The ATLAS Data Acquisition System in	POZO ASTIGARRAGA Mikel
	LHC Run 2	Eukeni
11.00-11.30	Coffee	

## Triggering, Data Acquisition, Control Systems II

11.30-11.45	The design and performance of the ATLAS Inner	KILBY Callum
	Detector trigger in high pileup collisions at 13 TeV at	
	the Large Hadron Collider	
11.45-12.00	The ATLAS Trigger system upgrade and	SHAW Savanna
	performance in Run 2	
12.00-12.15	Performance of the ATLAS Muon Trigger in Run 2	MORGENSTERN Marcus
12.15-12.30	The ATLAS Trigger Menu design for higher	TORRO Emma
	luminosities in Run 2	
12.30-12.45	The development of Online Event Display using	GERTSENBERGER
	ATLAS TDAQ for the NICA experiments	Konstantin
12.45-13.00	MultiPurpose Detector - MPD	BABKIN Vadim

13.00-14.30 Lunch

Status of the test stand TOF MPD system	DMITRIEV Alexandr
Development of L0 trigger for study of AA-	YUREVICH Vladimir
collisions in BM@N/Nuclotron and MPD/NICA	
experiments	
Readout electronics for TPC detector in the	VERESCHAGIN Stepan
MPD/NICA project	
Multi-Purpose Detector (MPD) Slow Control	SHUTOV Vitaly
System, historical background, present status and	
plans	
Control system of the superconducting magnets	SEDYKH Georgy
cryogenic test bench for the NICA accelerator	
complex	
Data acquisition and data processing software for	BYCHKOV Alexander
magnetic measurements for NICA magnets	
Coffee	
Slow Control system at BM@N experiment	EGOROV Dmitry
Trigger electronics for BM@N setup in 2017	ROGOV Victor
	Development of L0 trigger for study of AA- collisions in BM@N/Nuclotron and MPD/NICA experiments Readout electronics for TPC detector in the MPD/NICA project Multi-Purpose Detector (MPD) Slow Control System, historical background, present status and plans Control system of the superconducting magnets cryogenic test bench for the NICA accelerator complex Data acquisition and data processing software for magnetic measurements for NICA magnets <b>Coffee</b> Slow Control system at BM@N experiment

## Distributed Computing. GRID & Cloud computing

11.30-11.45	JINR Grid Tier-1@Tier-2	STRIZH Tatiana
11.45-12.00	Belle II Distributed Computing	SCHRAM Malachi
12.00-12.15	COMPASS Grid Production System	PETROSYAN Artem
12.15-12.30	Optimizing new components of PanDA for ATLAS production on HPC resources	OLEYNIK Danila
12.30-12.45	Applying Big Data solutions for log analytics in the PanDA infrastructure	ALEKSEEV Aleksandr
12.45-13.00	JINR cloud: changes in architecture, getting distributed, smarter and more powerful.	BALASHOV Nikita

## 13.00-14.30 Lunch

14.30-14.45	Optimization of the JINR Cloud's Efficiency.	BALASHOV Nikita
14.45-15.00	Experience with containers for OSG NOvA jobs	VOKAC Petr
15.00-15.15	JINR cloud computing in the NOvA experiment	SAMOYLOV Oleg
15.15-15.30	Clouds of JINR, University of Sofia and INRNE Join	DIMITROV Vladimir
	Together	
15.30-15.45	BY-NCPHEP site: cloud and grid	MOSSOLOV Vladimir
15.45-16.00	Approaches to building of Cloud base scientific	ILIUHA Nicolai
	computing infrastructure	
16.00-16.20	Coffee	
16.20-16.35	Service Reliability with the Cloud of Data Centers	SHEVEL Andrey
	under Openstack	
16.35-16.50	Metadata curation and integration in High Energy	GRIGORIEVA Maria
	and Nuclear Physics.	
16.50-17.05	Data management in heterogeneous metadata storage	GOLOSOVA, Marina
	and access infrastructures	
17.05-17.20	Online monitoring system for the BM@N experiment	GABDRAKHMANOV Ilnur
17.20-17.35	Multy-level monitoring system for Multifunctional Information and Computing Complex at JINR	PELEVANYUK Igor

## Friday 29 September, 2017

### Plenary

09.00-9.20	Novel approach to the particle track reconstruction	OSOSKOV Gennady
	based on deep learning methods	
9.20-9.40	Predictive analytics as an essential mechanism for	TITOV Mikhail
	situational awareness at the ATLAS Production System	
9.40-10.00	IT for Applied Environmental Research in JINR	JANCIK Petr
10.00-10.20	Application of Semantic Integration Methods for Cross-	YASINOVSKAYA
	agency Information Sharing	Elena
10.20-11.00	Dell EMC and IBS Platformix	PAVLOV Fedor
11.00-11.30	Coffee	

## Computations with Hybrid Systems (CPU, GPU, coprocessors)

11.30-11.45	HybriLIT - the main component of the MICC for	PODGAINY Dmitry
	heterogeneous computations at JINR	
11.45-12.00	Machine-learning algorithms for identification and	STRELTSOVA Oxana
	separation of the neutron and gamma-ray signals	
	obtained from the DEMON detector	
12.00-12.15	Application of NVIDIA CUDA technology to	SAMARIN Viacheslav
	calculation of ground states of few-body nuclei	
12.15-12.30	Automated system to monitor and predict matching of	BELOV Sergey
	vocational education programs with labour market	
12.30-12.45	Parallel framework for partial wave analysis for the	TOKAREVA Victoria
	BES-III experiment	
13.00-14.30	Lunch	

### **Innovative IT Education**

11.30-11.45	Specialists - Electronic Training for «NICA» Program	SAKHAROV Iurii
11.45-12.00	Training of skilled personnel adaptive strategy for digital economy goals in the Dubna State University	CHEREMISINA Evgenia
12.00-12.15	Embedding of containerization technology in the core of the virtual computer lab	TOKOREVA Nadezhda
12.15-12.30	On the Way to Open Education	KREIDER Oksana
12.30-12.45	Interrelation communication in the education for robotics	TYATYUSHKINA Olga
12.45-13.00	Activities Related to Scientific Visualization at National Research Nuclear University "MEPhI", Moscow, Russia: Research, Education and Publications	PILYUGIN Victor
13.00-14.30	Lunch	
14.30-14.45	"Interactive Platform of Nuclear Experiment Modeling" as a multidisciplinary tool in the training of specialists in the fields of ICT and	PANEBRATTSEV Yury

	experimental nuclear physics.	
14.45-15.00	Online courses and new educational programs to support research priorities within the subject- matter of JINR projects on the basis of modern educational platforms	BELAGA Victoria
15.00-15.15	Educational Support of NICA Project	PANEBRATTSEV Yury
15.15-15.30	Cybersecurity of Internet of Things - Risks and	KARLOV Alexandre
	Opportunities	
15.30-15.45	Information Disclosure in Software Intensive	DIMITROV Vladimir
	Systems	
15.45-16.00	Quantum Relativistic Informatics: Computer Science,	ULYANOV Sergey
	Quantum Intelligent Cognitive Control and Smart	
	Robotics Applications	
16.00-16.30	Coffee	

## Research Data Infrastructures@Computing for Large Scale Facilities

14.30-14.45	NFV Cloud Infrastructure for Researchers	ANTONENKO Vitaly
14.45-15.00	Resource sharing based on HTCondor for multiple	SHI Jingyan
	experiments	
15.00-15.15	Current status of the geometry database for the	FILOZOVA Irina
	CBM experiment	
15.15-15.30	SALSA - Scalable Adaptive Large Structures	VALA Martin
	Analysis	
15.30-15.45	Application of the HEP Computing Tools for	MASHINISTOV Ruslan
	Brain studies	
16.00-16.30	Coffee	

16.30-17.00	Best students reports
17.00	Closing