

Session Program

June 1, 2019 to September 30, 2019



Student's Zone 2019 of the NICA Project

Presentations of topics

JINR DUBNA, B: 215; room 327
Joliot Curie 6

Mon, July 1

11:00 AM

Presentations of topics: Part I

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

11:00 - 11:10

Non-organic surface modification with the solid state particle removal.

Speaker

Mr Krystian Roslon

11:10 - 11:20

Integration of temperature monitoring software inside RACK Master and Slave 19 "cabinets for the Slow Control System for the TOF-MPD detector

Speaker

Mr Krystian Roslon

11:20 - 11:30

Android application for monitoring data from the Slow Control System for the TOF-MPD detector

Speaker

Mr Krystian Roslon

11:30 - 11:40

Modeling of K+K- fermoscopic correlations in p+Pb collision using the Therminator2 model

Speaker

Mr Krystian Roslon

11:40 - 11:50

Image taken by Fluke TiS20 visualization by LabVIEW

Speaker

Mr Krystian Roslon

11:50 - 12:00

Development of software for monitoring temperature inside the MPD-TOF detector

Speaker

Mr Krystian Roslon

12:00 PM

1:00 PM

Presentations of topics: Part II

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

13:00 - 13:10

Model of the MPD Multi-Detector prepared with a 3D printing method

Speaker

Daniel Dabrowski

13:10 - 13:20

Development of the PLC controller software for the Mixer module of the MPD/TOF Gas System

Speaker

Daniel Dabrowski

13:20 - 13:30

Development of the data logging, archiving and exporting to database parameters of the MPD/TOF Gas System control software**Speaker**

Daniel Dabrowski

13:30 - 13:40

Simulation of the MPD/TOF Gas System operation in the Fluidsim environment**Speaker**

Daniel Dabrowski

13:40 - 13:50

Mobile application for the MPD/TOF Gas System monitoring**Speaker**

Daniel Dabrowski

13:50 - 14:00

Development of the SCADA software for MPD/TOF Gas System in the Simens WinCC**Speaker**

Daniel Dabrowski

14:00 - 14:10

Gas Supply project for the MPD/TOF Gas System**Speaker**

Daniel Dabrowski

14:10 - 14:20

Development of the PLC controller software for the Recirculation module of the MPD/TOF Gas System**Speaker**

Daniel Dabrowski

14:20 - 14:30

Studies of the MPD/TOF detector efficiency and time resolution for varying gas mixture components concentration.**Speaker**

Daniel Dabrowski

14:30 - 14:40

Pressure transmitters, mass flow controllers and control valves calibration and preparation for operation**Speaker**

Daniel Dabrowski

14:40 - 14:50

Emergency situations testing and error handling of the MPD/TOF Gas System control software**Speaker**

Daniel Dabrowski

3:00 PM

Tue, July 2

9:30 AM

Presentations of topics: Part III

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

09:30 - 09:40 **NICA-MPD-PLATFORM (NMP)**

Speaker

Mr Marek Peryt

09:40 - 09:50 **NMP IPD Intelligent Power Distributor**

Speaker

Mr Marek Peryt

09:50 - 10:00 **NMP SCADA WinCC**

Speaker

Mr Marek Peryt

10:00 - 10:10 **NMP Temperature monitoring**

Speaker

Mr Marek Peryt

10:10 - 10:20 **NMP Access Control**

Speaker

Mr Marek Peryt

10:20 - 10:30 **NMP InteliPhy**

Speaker

Mr Marek Peryt

10:30 AM

11:00 AM

Presentations of topics: Part IV

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

11:00 - 11:10 **Heat transfer simulation of the MPD-TOF detector**

Speakers

Mr Krystian Roslon, Maciej Czarnynoga

11:10 - 11:20 **Heat transfer simulation of the MPD-TPC detector**

Speakers

Mr Krystian Roslon, Maciej Czarnynoga

11:20 - 11:30 **Heat transfer simulation of the MPD-ITS detector**

Speakers

Mr Krystian Roslon, Maciej Czarnynoga

11:30 - 11:40 **Heat transfer simulations for the PXI module and the CAEN module**

Speaker

Maciej Czarnynoga

11:40 - 11:50

Design and heat transfer simulations for the TOF_MPD detector cooling system**Speaker**

Maciej Czarnynoga

11:50 - 12:00

NMP Grounding monitoring**Speaker**

Mr Marek Peryt

12:00 - 12:10

NMP Configurable screen for the control room.**Speaker**

Mr Marek Peryt

12:10 - 12:20

NMP Alpha, beta, gamma monitoring**Speaker**

Mr Marek Peryt

12:20 - 12:30

NMP Monitoring of the Earth's magnetic field**Speaker**

Mr Marek Peryt

12:30 PM

1:30 PM

Presentations of topics: PART V**Session** | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

13:30 - 13:40

Drive x, y, z.**Speaker**

Mr Marek Peryt

13:40 - 13:50

EqDb Equipment Database.**Speaker**

Mr Marek Peryt

13:50 - 14:00

Drive r, φ .**Speaker**

Mr Marek Peryt

14:00 - 14:10

Laboratory infrastructure**Speaker**

Mr Marek Peryt

14:10 - 14:20

NMP Cable tester**Speaker**

Mr Marek Peryt

14:20 - 14:30

NMP GPS Synchronization**Speaker**

Mr Marek Peryt

Subcontributions

Part I

Speaker

Mr Marek Peryt

14:30 - 14:40

NMP Environmental monitoring MPD

Speaker

Mr Marek Peryt

3:00 PM

Wed, July 3

9:30 AM

Presentations of topics: PART VI

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

09:30 - 09:40 **TPC detector construction**

Speaker

Sergey Aleksandrovich Movchan

09:40 - 10:30 **TPC read-out chambers development**

Speaker

Sergey Aleksandrovich Movchan

12:00 PM

1:00 PM

3:00 PM

Presentations of topics: Part VII

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

Thu, July 4

9:30 AM

Presentations of topics: Part VIII

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

09:30 - 09:40 **Management of large-scale physics simulations**

Speaker

Adam Kisiel

09:40 - 09:50

Analysis of tracking efficiency and momentum resolution for MPDRoot

Speaker

Adam Kisiel

09:50 - 10:00 **Collaboration tools for MPD**

Speaker

Adam Kisiel

10:00 - 10:10

Feasibility studies of baryon correlations in the MPD experiment at the NICA complex

Speaker

Adam Kisiel

10:10 - 10:20 **Generation of large vHELLE datasamples with MPDRoot**

Speaker

Adam Kisiel

10:20 - 10:30 **Generation of large UrQMD Monte-Carlo datasample with MPDRoot**

Speaker

Adam Kisiel

10:30 AM

11:00 AM

Presentations of topics: Part IX

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

11:00 - 11:40 **Inner tracker development**

Speaker

Yuriy Andreevich Murin

11:40 - 11:50 **Software development for MPD**

Speaker

Yuriy Konstantinovich Potryebennikov

11:50 - 12:00 **Setup of the NICA computing cluster**

Speaker

Yuriy Konstantinovich Potryebennikov

12:30 PM

12:00 - 12:30

Cosmic ray measurements - using those detectors in huge physical experiments as LHC or NICA.

Speaker

Marcin Bielewicz

1:30 PM

Presentations of topics: Part XII

Session | **Location:** JINR DUBNA, B: 215; room 327, Joliot Curie 6

13:30 - 13:40

Group collaboration tools for the software of MPD

Speaker

Oleg Vasilievich Rogachevsky`

13:40 - 13:50

Model of the MPD detector

Speaker

Bartłomiej Juruć

13:50 - 14:00

Installation and implementation of JIRA and Confluence ATlassian platforms for the Engineering Support for NICA Group.

Speaker

Mr Marek Peryt

14:00 - 14:10

Automatic, multipoint, high precision system for temperature measurement.

Speaker

Marcin Bielewicz

14:10 - 14:25

Experimental measurement of the level of transmutation and neutron flux density in subcritical nuclear reactors ADS.

Speaker

Marcin Bielewicz

5:10 PM