



# Student's Zone 2019 of the NICA Project

## Monday 1 July 2019

### Presentations of topics: Part I - B: 215; room 327 (11:00 - 12:00)

time	[id] title	presenter
11:00	[7] Non-organic surface modification with the solid state particle removal.	Mr ROSLON, Krystian
11:10	[15] Integration of temperature monitoring software inside RACK Master and Slave 19 "cabinets for the Slow Control System for the TOF-MPD detector	Mr ROSLON, Krystian
11:20	[14] Android application for monitoring data from the Slow Control System for the TOF-MPD detector	Mr ROSLON, Krystian
11:30	[11] Modeling of K+K- femtoscopic correlations in p+Pb collision using the Therminator2 model	Mr ROSLON, Krystian
11:40	[12] Image taken by Fluke TiS20 visualization by LabVIEW	Mr ROSLON, Krystian
11:50	[13] Development of software for monitoring temperature inside the MPD-TOF detector	Mr ROSLON, Krystian

### Presentations of topics: Part II - B: 215; room 327 (13:00 - 15:00)

time	[id] title	presenter
13:00	[18] Model of the MPD Multi-Detector prepared with a 3D printing method	DABROWSKI, Daniel
13:10	[20] Development of the PLC controller software for the Mixer module of the MPD/TOF Gas System	DABROWSKI, Daniel
13:20	[24] Development of the data logging, archiving and exporting to database parameters of the MPD/TOF Gas System control software	DABROWSKI, Daniel
13:30	[22] Simulation of the MPD/TOF Gas System operation in the Fluidsim environment	DABROWSKI, Daniel
13:40	[17] Mobile application for the MPD/TOF Gas System monitoring	DABROWSKI, Daniel
13:50	[19] Development of the SCADA software for MPD/TOF Gas System in the Simens WinCC	DABROWSKI, Daniel
14:00	[26] Gas Supply project for the MPD/TOF Gas System	DABROWSKI, Daniel
14:10	[21] Development of the PLC controller software for the Recirculation module of the MPD/TOF Gas System	DABROWSKI, Daniel
14:20	[16] Studies of the MPD/TOF detector efficiency and time resolution for varying gas mixture components concentration.	DABROWSKI, Daniel
14:30	[25] Pressure transmitters, mass flow controllers and control valves calibration and preparation for operation	DABROWSKI, Daniel
14:40	[23] Emergency situations testing and error handling of the MPD/TOF Gas System control software	DABROWSKI, Daniel

## Tuesday 2 July 2019

### Presentations of topics: Part III - B: 215; room 327 (09:30 - 10:30)

time	[id] title	presenter
09:30	[48] NICA-MPD-PLATFORM (NMP)	Mr PERYT, Marek
09:40	[53] NMP IPD Intelligent Power Distributor	Mr PERYT, Marek
09:50	[50] NMP SCADA WinCC	Mr PERYT, Marek
10:00	[60] NMP Temperature monitoring	Mr PERYT, Marek
10:10	[59] NMP Access Control	Mr PERYT, Marek
10:20	[54] NMP InteliPhy	Mr PERYT, Marek

### Presentations of topics: Part IV - B: 215; room 327 (11:00 - 12:30)

time	[id] title	presenter
11:00	[8] Heat transfer simulation of the MPD-TOF detector	Mr ROSLON, Krystian CZARNYNOGA, Maciej
11:10	[9] Heat transfer simulation of the MPD-TPC detector	Mr ROSLON, Krystian CZARNYNOGA, Maciej
11:20	[10] Heat transfer simulation of the MPD-ITS detector	Mr ROSLON, Krystian CZARNYNOGA, Maciej
11:30	[58] Heat transfer simulations for the PXI module and the CAEN module	CZARNYNOGA, Maciej
11:40	[57] Design and heat transfer simulations for the TOF_MPD detector cooling system Design and heat transfer simulations for the tof-mpd detector cooling system	CZARNYNOGA, Maciej
11:50	[52] NMP Grounding monitoring	Mr PERYT, Marek
12:00	[49] NMP Configurable screen for the control room.	Mr PERYT, Marek
12:10	[56] NMP Alpha, beta, gamma monitoring	Mr PERYT, Marek
12:20	[55] NMP Monitoring of the Earth's magnetic field	Mr PERYT, Marek

### Presentations of topics: PART V - B: 215; room 327 (13:30 - 15:00)

time	[id] title	presenter
13:30	[44] Drive x, y, z.	Mr PERYT, Marek
13:40	[47] EqDb Equipment Database.	Mr PERYT, Marek
13:50	[45] Drive r, $\varphi$ .	Mr PERYT, Marek
14:00	[46] Laboratory infrastructure	Mr PERYT, Marek
14:10	[51] NMP Cable tester	Mr PERYT, Marek
14:20	[63] NMP GPS Synchronization	Mr PERYT, Marek
	- [1] Part I	Mr PERYT, Marek
14:30	[61] NMP Environmental monitoring MPD	Mr PERYT, Marek

# Wednesday 3 July 2019

**Presentations of topics: PART VI - B: 215; room 327 (09:30 - 12:00)**

time	[id] title	presenter
09:30	[29] TPC detector construction	MOVCHAN, Sergey Aleksandrovich
09:40	[30] TPC read-out chambers development	MOVCHAN, Sergey Aleksandrovich

**Presentations of topics: Part VII - B: 215; room 327 (13:00 - 15:00)**

# Thursday 4 July 2019

## **Presentations of topics: Part VIII - B: 215; room 327 (09:30 - 10:30)**

time	[id] title	presenter
09:30	[5] Management of large-scale physics simulations	KISIEL, Adam
09:40	[4] Analysis of tracking efficiency and momentum resolution for MPDRoot	KISIEL, Adam
09:50	[6] Collaboration tools for MPD	KISIEL, Adam
10:00	[1] Feasibility studies of baryon correlations in the MPD experiment at the NICA complex	KISIEL, Adam
10:10	[3] Generation of large vHELLE datasamples with MPDRoot	KISIEL, Adam
10:20	[2] Generation of large UrQMD Monte-Carlo datasample with MPDRoot	KISIEL, Adam

## **Presentations of topics: Part IX - B: 215; room 327 (11:00 - 12:30)**

time	[id] title	presenter
11:00	[32] Inner tracker development	MURIN, Yuriy Andreevich
11:40	[27] Software development for MPD	POTRYEBENNIKOV, Yuriy Konstantinovich
11:50	[28] Setup of the NICA computing cluster	POTREBYENNIKOV, Yuriy Konstantinovich
12:00	[40] Cosmic ray measurements - using those detectors in huge physical experiments as LHC or NICA.	BIELEWICZ, Marcin

## **Presentations of topics: Part XII - B: 215; room 327 (13:30 - 17:10)**

time	[id] title	presenter
13:30	[31] Group collaboration tools for the software of MPD	ROGACHEVSKY`, Oleg Vasilievich
13:40	[33] Model of the MPD detector	JURUĆ, Bartłomiej
13:50	[43] Installation and implementation of JIRA and Confluence ATlassian platforms for the Engineering Support for NICA Group.	Mr PERYT, Marek
14:00	[39] Automatic, multipoint, high precision system for temperature measurement.	BIELEWICZ, Marcin
14:10	[41] Experimental measurement of the level of transmutation and neutron flux density in subcritical nuclear reactors ADS.	BIELEWICZ, Marcin