



# MMCP2024

## Monday 21 October 2024

### Machine learning and big data analytics - S2 (14:00 - 15:30)

time	[id] title	presenter
14:00	[39] From Black Holes to Data Pipelines: A Physicist's Journey to Tech Innovation	SAGHATELIAN, Armen
14:15	[38] Basic tasks of artificial intelligence in multidisciplinary research	CHEREMISINA, Evgenia
14:30	[44] Development and Visualization of Cellular Automata Models for Predicting Heterogeneous Traffic Flows	TRAPEZNIKOVA, Marina
14:45	[45] Speaker Tagging Correction With Non-Autoregressive Language Models	KARAMYAN, Davit
15:00	[42] A deep learning model for automated quantification of DNA repair foci in somatic mammalian cells	SHADMEHRI, Sara

### Machine learning and big data analytics - S2 (16:00 - 18:00)

time	[id] title	presenter
16:00	[46] Computer algorithms for synthetic images modelling based on diffusion models	TIUTIUNNIK, Anastasiia
16:15	[47] Technology for selecting deep learning models based on actualized user experience using the Auto-ML approach	SMETANIN, Artem
16:30	[43] Application of modern consolidation methods for processing complex medical data	SHCHEGOLEVA, Nadezhda
16:45	[109] Machine Learning for Cyclotron Magnetic Field Isochronization	LYAPIN, Ivan
17:00	[48] An Investigation of Two-Level Data Processing for Packet Transmission Time Analysis Using Machine Learning Methods.	KIYAMOV, Jasur

# Thursday 24 October 2024

## Machine learning and big data analytics - S1 (14:00 - 15:30)

time	[id] title	presenter
14:00	[104] Specifics of AI Generative Models When Used for Particle Physics	RATNIKOV, Fedor
14:15	[105] Optimisation of the Accelerator Control by Reinforcement Learning: A Simulation-based Approach	IBRAHIM, Anwar
14:30	[106] Machine Learning for Particle Identification at MPD	PAPOYAN, Vladimir
14:45	[107] Deep learning methods in high luminosity track reconstruction scenario: applying TrackNET to TrackML challenge	RUSOV, Daniil
15:00	[128] Track Reconstruction Transformer (TRT): A Scalable Deep Learning Approach for Particle Tracking in High-Energy Physics	NIKOLSKAIA, Anastasiia
15:15	[138] Neural networks in the Baikal-GVD experiment: selection of neutrino events and neutrino energy reconstruction	MATSEIKO, Albert