



# The XXIII International Scientific Conference of Young Scientists and Specialists (AYSS-2019)

## Monday, 15 April 2019

### Theoretical Physics: Section 1 Part 1 (15:00 - 16:30)

-Conveners: Vsevolod Katkov; Andrey Pikelner; Yaroslav Klopot

time	[id] title	presenter
15:00	[457] Variational calculations of the $H^+_2$ and $HD^+$ rovibrational energies	Mr BEKBAEV, Askhat
15:15	[443] Short-range-Induced Resonances in Two-dimensional Dipolar Scattering	Mr KOVAL, Eugene
15:30	[327] Tunneling of two interacting atoms from excited states	Mr ISHMUKHAMEDOV, Ilyas
15:45	[469] Resonance features of the Josephson junction with ferroelectrical barrier	Dr RAHMONOV, Ilhom
16:00	[459] How to assemble polydisperse nanoparticles into clusters with predefined fractal dimension?	Mr TOMCHUK, Oleksandr
16:15	[480] Influence of stationary charge imbalance on Shapiro step features	Mr KULIKOV, Kirill

### Theoretical Physics: Section 1 Part 2 (17:00 - 18:30)

-Conveners: Vsevolod Katkov; Andrey Pikelner; Yaroslav Klopot

time	[id] title	presenter
17:00	[379] CPT study of the Fermi-surface reconstruction in the t-J model	Mr IVANTSOV, Ilya
17:15	[320] CORRECT USAGE OF THE VLASOV EQUATION	Mr SUCHKOV, Denis
17:30	[429] Role of non-abelian anomaly in transition form factors of $\pi^0, \eta, \eta'$ , generalization for the case of any photon virtuality	Mr KHLEBTSOV, Sergei
17:45	[354] Kinetic description of the electron-positron plasma created from vacuum under the action of a strong laser field	Mr PIROGOV, Stanislav
18:00	[308] Form factors of three-nucleon nuclei in the relativistic case	Mr YUREV, Sergey
18:15	[462] Field confinement in infrared effective QCD and thermal field dynamics	Mr RAWAT, Deependra Singh

# Tuesday, 16 April 2019

## Theoretical Physics: Section 2 (14:00 - 15:45)

-Conveners: David Edwin Alvarez Castillo; Anastasia Golubtsova

time	[id] title	presenter
14:00	[332] De Sitter space and Entanglement	Mr DIAZ, Felipe
14:15	[454] Vacuum fluctuations for a charged scalar field in de Sitter spacetime with compact dimensions	Mr SIMONYAN, Davit
14:30	[370] Bimetric gravity from the spectral point of view	Mr BOCHNIAK, Arkadiusz
14:45	[470] Chameleon mechanism in inhomogeneous astrophysical objects	Ms KHOSRAVI LARGANI, Noshad
15:00	[374] Cylindrical curves and classical paths of irreducible massive spinning particles in 4D Minkowsky space	Mr RETUNTSEV, Ivan
15:15	[348] Green's function technique for precise calculation of false vacuum decay rate.	Mr BEZUGLOV, Maxim
15:30	[373] Stable interactions between higher derivative extended Chern-Simons and charged scalar field	Ms ABAKUMOVA, Victoria