## **Table of contents**

Wednesday 23 October 2	024	1
Friday 25 October 2024		2

# The 7th international conference on particle physics and astrophysics

### Wednesday 23 October 2024

Gravitation and Cosmology: Oral talks - Moskvorechye 1 (09:40-11:30)

-Conveners: Konstantin Belotsky

time	[id] title	presenter
09:40	[31] Finding the valid gravity theory from observations of black hole silhouettes	Prof. DOKUCHAEV, Vyacheslav
10:00	[62] Should we take into account nontrivial spacetime topology, changes of metric signature and similar hypothetical phenomena when quantizing gravity?	SHESTAKOVA, Tatyana
10:15	[84] Horndeski theory on a dynamical spherically-symmetric background	SHAROV, Mikhail
10:30	[232] On reconstruction procedure for special spherically-symmetric metrics in scalar-Einstein-Gauss-Bonnet model: the Schwarzschild metric test	IVASHCHUK, Vladimir
10:45	[252] Reconstruction the scalar-torsion gravity version from the frame of exact cosmological solutions	DENTSEL, Evgenii
11:00	[309] Cosmological models in the scalar-tensor theories of gravity, consistent with observational constraints	KOSHELEV, Nickolay
11:15	[48] New slow-roll approximations for inflation in Einstein-Gauss-Bonnet gravity	Dr. SKUGOREVA, Maria

#### **Gravitation and Cosmology - Moskvorechye 1 (17:00-19:05)**

-Conveners: Alexander Zakharov

time	[id] title	presenter	
17:00	[2] Black Hole Singularity with Quantum Geometric Approach	Prof. TAWFIK, Abdel Nasser	
17:15	[136] Dark matter around primordial black holes	Dr. EROSHENKO, Yury	
17:30	[212] Primordial black holes mergers	STASENKO, Viktor	
	[124] The effect of tidal deformations on the gravitational wave signal during neutron star mergers	KLOPOVASAPOROVSKAI A, Irina	
	[261] Relic gravitational waves in cosmological models based on Einstein-Gauss-Bonnet gravity	MANUCHARYAN, Gevorg	
	[202] Limits on the properties of primordial black holes clusters from microlensing analysis	TOSHCHENKO, Konstantin	
18:30	[73] Evolution of the mass spectrum of primordial black holes in the Friedmann Universe	SOLNYSHKO, Lidiia	
18:45	[280] Multidimensional gravity, black holes and mirror stars	BRONNIKOV, Kirill	

## Friday 25 October 2024

#### **Gravitation and Cosmology - Moskvorechye 1 (16:30-19:00)**

-Conveners: Maxim Solovyev

time	[id] title	presenter
16:30	[135] Ultralight ALP dark matter and 21 cm absorption signals in new physics	Prof. DAS, Chitta Ranjan
16:45	[16] Formation of dark atoms	SOPIN, Danila
17:00	[154] Formation and evolution of complex soliton structures in the early Universe	MURYGIN, Boris
17:15	[5] Superfluid Stars and the Dawn of Quantum Astrophysics	ZLOSHCHASTIEV, Konstantin
17:30	[228] Viscosity in an accelerated relativistic medium from the Unruh effect vs string theory bound	Mr. LAPYGIN, Dmitriy
17:45	[74] Cosmological Constant Suppression in Non-Stationary Scalar Covariant State	AYNBUND, Asya
18:00	[188] Non-Gaussianities in the bouncing Universe model	KOTENKO, Maxim
18:15	[28] Quartet-metric gravity and scalar graviton dark holes	ZENIN, Oleg
18:30	[52] Tidal force in Newtonian gravity	Mr. MALIK, Sameer
18:45	[281] Schwarzschild self-consistent modeling of the Fornax dSph galaxy using line-of-sight velocity distribution.	Mrs. SHCHELKANOVA, Galina