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# The 5th international conference on particle physics and astrophysics

## Tuesday 06 October 2020

### Gravitation and Cosmology: 1 (11:00-13:00)

-Conveners: Vyacheslav Dokuchaev

time	[id] title	presenter
11:00	[607] On generalized Melvin solutions for Lie algebras of rank 4	Dr. BOLOKHOV, Sergei
11:20	[746] Second order hydrodynamics, anisotropic expansion and holographic dual of QGP	Ms. PRUSETH, Priyanka Priyadarshini
11:40	[829] Two ways to construct Hamiltonian dynamics in extended phase space	Dr. SHESTAKOVA, Tatyana
12:00	[840] Super dense star in non-commutative space-time	RAJAGOPAL, Vishnu
12:20	[608] On stable exponential cosmological solutions with three different Hubble-like parameters in EGB model with a $\Lambda$ -term	Dr. IVASHCHUK, Vladimir
12:40	[818] A class of special dilatonic dyon-like black hole solutions in the model with two Abelian gauge fields and two scalar fields	Mr. MALYBAYEV, Algis

### Gravitation and Cosmology: 2 (17:05-19:25)

-Conveners: Elena Arbuzova

time	[id] title	presenter
17:05	[819] Hybrid metric-Palatini gravity: black holes, wormholes, singularities and stringlike objects	Prof. BRONNIKOV, Kirill
17:25	[676] Modeling the motion of bright spot in jets from black holes M87* and SgrA*	Prof. DOKUCHAEV, Vyacheslav
17:45	[690] Supermassive primordial black holes at high redshifts	Dr. EROSHENKO, Yury
18:05	[691] Primordial black holes in Brans-Dicke gravity	Prof. EROSHENKO, Yury
18:25	[600] Quantum particles and the ergosphere of the Kerr metric	NEZNAMOV, Vasily
18:45	[758] Scattering d-waves on distorted black holes	NURMAGAMBETOV, Alexei
19:05	[687] Tidal forces near a black hole with scalar hairy	TSIRULEV, Alexander

## Thursday 08 October 2020

### Gravitation and Cosmology: 3 (11:00-13:00)

-Conveners: Sergei Bolokhov

time	[id] title	presenter
11:00	[622] Interaction between superconductor and weak static gravitational field	GALLERATI, Antonio
11:20	[817] Spectroscopic simulations for the Euclid Survey	Dr. LUCA, Paganin
11:40	[713] Dark matter and dark energy as superfluid vacuum phenomenon	Dr. ZLOSHCHASTIEV, Konstantin
12:00	[930] The use of the effective potential for construction of inflationary models with the Gauss-Bonnet term	VERNOV, Sergey
12:20	[838] The mechanism of domain walls and strings formation in the early Universe	MURYGIN, Boris

### Gravitation and Cosmology: 4 (17:35-19:50)

-Conveners: Sergey Rubin

time	[id] title	presenter
17:35	[692] Quadratic Gravity and Non-Conservativity of Energy-Momentum Tensor Due to the Double Layers	Prof. BEREZIN, Victor
17:55	[629] Cosmological Scalar field : A Brief Review	JOSHI, Tanisha
18:15	[822] Superheavy dark matter in $R^2$ -cosmology	Prof. ARBUZOVA, Elena
18:35	[718] Nonstationary configurations of a massless scalar field	Dr. TCHEMARINA, Julia
18:55	[798] Interactive, $F(R)$ and other cosmological models, recent observational data and $H_0$ tension	SHAROV, German
19:15	[873] Cosmological baryon/lepton assymetry in terms of Kaluza-Klein extra dimensions	NIKULIN, Valery Prof. RUBIN, Sergey