# BLTP/JINR-KLTP/CAS JOINT WORKSHOP "PHYSICS OF STRONG INTERACTION"

Dubna, June 27-July 2, 2016

#### **PROGRAMME**

## June 27, Monday

Arrival

June 28, Tu	esday	
9:30 - 10:00	Registration	
10:00 - 10:10	Opening	
10:10 - 10:35	Study of breakup and transfer of weakly bound nuclei to explore the low energy reaction dynamics	Huan-Qiao Zhang
10:40 - 11:05	Study of nuclear symmetry energy with breakup reaction induced by deuteron	Li Ou
11:10 - 11:40	Coffee Break	
11:40 - 12:05	The threshold anomaly of optical potentials and the dispersion relation for weakly-bound nuclear systems	Cheng-Jian Lin
12:10 - 12:35	Cluster structure of light nuclei	S.N. Ershov
12:40 - 13:05	Gamma-decay in light nuclei. Borromean halo, Tango halo, and halo isomers	I. Izosimov
13:10 - 15:00	Lunch	
15:00 - 15:25	Inelastic <sup>9</sup> Be+α scattering: do the concepts of <sup>9</sup> Be structure should be changed?	A.A. Ogloblin
15:30 - 15:55	Impact of resonances of the weakly bound nucleus <sup>6</sup> Li on elastic scattering and fusion cross sections for reactions with spherical targets	A. Gomez Camacho
16:00 - 16:25	Observation of a proton halo in the unbound first excited state of $^{13}$ N	A.S. Demyanova
16:30 - 16:55	Coffee Break	
16:55 - 17:15	Do the dilute excited states exist in <sup>16</sup> O?	A.N. Danilov
17:20 - 17:45	Multi-neutron emission near new magic shell $N=34$	I.N. Borzov
17:50 - 18:10	Fragmentation of the $E1$ strength in neutron-rich nuclei	N.N. Arsenyev
18:15 - 18:35	Investigating the pygmy dipole resonance using $\beta$ -decay	S. Mishev
18:40 - 18:55	The effect of unpaired nucleons on the beta-decay properties	E. Sushenok
19:00	Welcome party, BLTP buffet.	

The Workshop sessions are held in the Conference hall at the 2nd floor of the BLTP building

June 29, Wednesday				
9:30 - 9:55 10:00 - 10:25 10:30 - 10:55 11:00 - 11:15	Alpha-decay of the neutron-deficient isotopes <sup>215–217</sup> U Theoretical predictions for the properties of heaviest nuclei Structure of superheavy nuclei Nuclear incompressibility and ISGMR energy from radius-constrained RMF model	Zai-Guo Gan A. Sobiczewski R.V. Jolos Kun Wang		
11:20 - 11:45	Coffee Break			
11:45 - 12:10 12:15 - 12:40	Decay properties of some unstable nuclei Microscopic neutron emission and fission rates in compound superheavy nuclei	Zhong-Zhou Ren Jun-Chen Pei		
12:45 - 13:10	Physics origin of transition from symmetric to asymmetric fission	H. Pasca		
13:15 - 15:00	Lunch			
15:00 - 15:25 15:30 - 15:55	Exploration of fission phase-space with TDHF+BCS Single-particle and collective rotational properties of transfermium nuclei in a PNC-CSM method	D. Lacroix Xiao-Tao He		
16:00 - 16:25	Isotopic fission-fragment distributions within the Langevin approach	K. Mazurek		
16:30 - 17:00	Coffee Break			
17:00 - 17:25	New isotope production with multi-fragmentation and multi-nucleon transfer	Ning Wang		
17:30 - 17:55	Analysis of the multinucleon transfer processes within Langevin-type model	A. Karpov		
18:00 - 18:25	The effect of the orbital angular momentum on the reaction mechanism in heavy ion collisions	A.K. Nasirov		

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## June 30, Thursday

9:15 - 9:40	Shear viscosity of nuclear matter by heavy-ion collisions	Yu-Gang Ma
9:45 - 10:10	Directed flow of hadrons in asymmetric heavy-ion collisions	V.D.Toneev
10:15 - 10:40	Strange quark matter objects with two types of surface treatments	Cheng-Jun Xia
10:45 - 11:10	Gluonic structure of the constituent quark	N. Kochelev
11:15 - 11:30	The role of instantons in high-energy polarization-dependent	N. Korchagin
	phenomena	

13:00 - Trip to Moscow

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July 1, Friday				
9:30 - 9:55 10:00 - 10:25 10:30 - 10:50	Core Gamow shell model with realistic nuclear forces Long-time isospin drift in heavy ion collisions Synthesis of very neutron deficient isotopes of medium-mass nuclei in complete fusion and quasifission reactions	Fu-Rong Xu Zhi-Gang Xiao Sh.A. Kalandarov		
10:55 - 11:25	Coffee Break			
11:25 - 11:50	Properties of neutron-rich nuclear matter and three-body force effect	Wei Zuo		
11:55 - 12:20	Three-body model for neutron-proton correlation in $N=Z$ -odd nuclei	Yusuke Tanimura		
12:25 - 12:50	Impact of 4-body correlations on clustering	RD. Lasseri		
12:55 - 15:00	Lunch			
15:00 - 15:25	Why do we still drop exchange interactions in relativistic nuclear models?	Nguyen Van Giai		
15:30 - 15:55	Quasipartices, phonons and beyond	Ch. Stoyanov		
16:00 - 16:25	Dinuclear system approach to the structure of odd-mass nuclei	T.M. Shneidman		
16:30 - 17:00	Coffee Break			
17:00 - 17:25	Hypernuclear structure in the Skyrme Hartree-Fock Theory	Xian-Rong Zhou		
17:30 - 17:55	Skyrme-TQRPA study of supernova weak-interaction processes	A.A. Dzhioev		
18:00 - 18:25	Universality in SGR burst statistics	V. N. Kondrateyv		
18:30	Closing			

## 19:15 Dinner. Restaurant at the hotel "Dubna"

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## July 2, Saturday

Discussions, departure