

Helmholtz International Summer School
“Nuclear Theory and Astrophysical Applications”
 Dubna, Russia, July 10 – 22, 2017

PROGRAM

	July 11 (Tuesday)	July 12 (Wednesday)	July 13 (Thursday)	July 14 (Friday)	WEEKEND	July 17 (Monday)	July 18 (Tuesday)	July 19 (Wednesday)	July 20 (Thursday)	July 21 (Friday)	
9:30 – 10:00	Opening										
10:00 – 10:45	S. Heinz	S. Ershov	A. Diaz-Torres	P. Constantin			M. Bejger	T. Szücs	H. Lenske	G. Pagliara	E. Kolomeitsev
10:45 – 11:15	Coffee break						Coffee break				
11:15 – 12:00	S. Heinz	S. Ershov	A. Diaz-Torres	P. Constantin			M. Bejger	T. Szücs	H. Lenske	G. Pagliara	E. Kolomeitsev
12:00 – 12:45	R. Jolos	I. Borzov	N. Antonenko	V. Chudoba			D. Blaschke	D. Lacroix	A. Bauswein	I. Iosilevskiy	H. Grigorian
12:45 – 15:00	Lunch break						Lunch break				
15:00 – 15:45	R. Jolos	I. Borzov	N. Antonenko	Excursion to Flerov Laboratory of Nuclear Reactions			D. Blaschke	D. Lacroix	A. Bauswein	I. Iosilevskiy	H. Grigorian
15:45 – 16:30	G. Stratan	F. Šimkovic	V. Nesterenko				A. Shipilov	M. Fortin	D. Voskresensky	D. Voskresensky	Farewell
16:30 – 17:00	Coffee break						Coffee break				
17:00 – 18:00	G. Stratan	F. Šimkovic	V. Nesterenko			Excursion to NICA	D. Alvarez-Castillo	E. Kolomeitsev	M. Fortin		
18:00 – 19:00	Welcome	PC1	PC2					PC3	PC4		

Lectures (45 min + 45 min) are marked with blue, seminars (60 min) are marked with green, PC – participant contributions (15-20 min each)

WEEKEND:

Saturday, July 15: “La Bayadere” in “The Kremlin Ballet” theatre

10:00 – departure of bus from the Hotel “Dubna”

Sunday, July 16: Picnic in Ratmino: approx. 11:00 – 14:00 (bring your favored music instruments)

10:30 – departure of bus from the Hotel “Dubna”

LIST OF LECTURES:

01. Antonenko Nikolai (Dubna), Heavy-ion reactions at low energies
02. Bauswein Andreas (Heidelberg), Neutron star mergers
03. Bejger Michał (Warsaw), Gravitational waves from neutron stars in the era of Advanced LIGO and Advanced Virgo detectors
04. Blaschke David (Dubna/Wrocław) and Álvarez-Castillo David (Dubna): Quark-hadron matter models for compact stars
05. Borzov Ivan (Moscow), Beta-decay of very neutron-rich nuclei
06. Chudoba Vratislav (Dubna), Experimental research with exotic nuclei
07. Constantin Paul (Bucharest), Nuclear physics with gamma beams at ELI-NP
08. Diaz-Torres Alexis (Surrey), Reaction dynamics of weakly bound nuclei
09. Ershov Sergei (Dubna), Halo nuclei
10. Fortin Morgane (Warsaw), Constraints on the equation of state from neutron star observations
11. Grigorian Hovik (Dubna/Yerevan), Neutron star cooling & Bayesian analysis for hybrid star
12. Heinz Sophie (Darmstadt/Giessen), Synthesis of elements
13. Iosilevskiy Igor (Moscow), Enthalpic and entropic phase transitions: anomalous thermodynamics of high energy density matter
14. Jolos Rostislav (Dubna), Historical introduction into relativistic mean-field theory
15. Kolomeitsev Evgeni (Banská Bystrica), Calculations of nuclear reactions in dense medium
16. Lacroix Denis (Orsay), Mean-field and beyond mean-field dynamical theories for nuclei
17. Lenske Horst (Giessen), Strangeness and nucleon resonances in nuclear matter and neutron stars
18. Nesterenko Valentin (Dubna), Giant resonances
19. Pagliara Giuseppe (Ferrara), Strange quark stars and gamma-ray-bursts

20. Shipilov Aleksei (Moscow), Helmholtz Association - Tools of international cooperation in science
21. Šimkovic Fedor (Bratislava/Dubna), Particle/nuclear physics aspects of neutrinoless double beta decay
22. Stratan Gheorghe (Dubna), The first scientific revolution and the beginnings of astrophysics
23. Szücs Tamás (Debrecen), The Felsenkeller facility for nuclear astrophysics
24. Voskresensky Dmitri (Moscow), Nuclear medium cooling theory for neutron stars

PARTICIPANT CONTRIBUTIONS:

PC1: 12 July, Wednesday

Babic Andrej (Dubna): Neutrinoless and two-neutrino double-beta decay with emission of single electron

Sun Xiang (Beijing): Deformed halo structure in ^{22}C with deformed relativistic Hartree–Bogoliubov model

Sushenok Evgeny (Dubna): The impact of the tensor interaction on the β -delayed neutron emission of the neutron-rich Ni isotopes

Testov Dmitry (Dubna): Exploring nuclear structure of neutron-rich nuclei via gross quantities of beta-decay

PC2: 13 July, Thursday

Wang Kun (Beijing): Nuclear incompressibility and ISGMR energies from radius-constrained RMF model

Imasheva Liliya (Moscow): Pairing of identical nucleons in nuclear spectra

Sidorov Semyon (Moscow): Ground state multiplet in odd-odd $N=Z$ nuclei

Markova Maria (Moscow): The evolution of shell structure in silicon isotopes

PC3: 18 July, Tuesday

Pasca Horia (Dubna): Spin distribution of fission fragments in binary decay reactions

Rui Han (Beijing): Northern Boundary of the “Island of Inversion” and triaxiality in ^{34}Si

Devaraja Haleshappa (Manipal): Production of new isotopes in deep inelastic multi-nucleon transfer reactions of $^{48}\text{Ca}+^{248}\text{Cm}$

PC4: 19 July, Wednesday

Alvear Terrero Diana (La Habana): Effects of slow rotation in magnetized white dwarfs

Bahashou Yauhen (Minsk): Effective confinement from quantum informational approach to strong interactions

Titov Oleg (Moscow): Recoil force from neutrino radiation in electron capture by polarized nuclei