

Helmholtz International Summer School  
**“PHYSICS OF HEAVY QUARKS AND HADRONS”**

*July 15-28, 2013, JINR, Dubna*

Time	Mon, 15	Tue, 16	Wed, 17	Thu, 18	Fri, 19	20.07 Picnic 21.07 Excursion
8:30-9:50	Registration					
9:50-10:00	Opening					
10:00-11:00	A. Ali	A. Ali	A. Ali	J. Körner	A. Grozin	
11:00 – 11:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	
11:30-12:30	E. Kuraev	A. Ali	A. Kotikov	M. Ivanov	A. Dzyuba (LHCb)	
12:30-13:30	C. Hambrock	C. Hambrock	R. Faustov	P. Santorelli	S. Tokar (ATLAS)	
13:30 – 15:00	lunch	lunch	lunch	lunch	lunch	
15:00-16:00	P. Colangelo	P. Colangelo	V. Galkin	V. Lyubovitsky	A. Grozin	
16:00 – 16:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	
16:30 – 17:30	A. Parkhomenko	D. Straub	D. Straub	Yu. Surovtsev	S. Nedelko	
17:30 – 18:00	M. Malyshev	C. Jäh	N. Makhaldiani	V. Sagun	C. Hambrock	
18:00 – 18:30	A. Trunin	I. Yeletskikh		M. Deka	A. Rusov	

Time	Mon, 22	Tue, 23	Wed, 24	Thu, 25	Fri, 26
10:00-11:00	S. Gerasimov	N. Kidonakis	N. Kidonakis	N. Kidonakis	M. Vysotsky
11:00 – 11:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:30-12:30	A. Grozin	D. Kazakov	A. Lenz	A. Lenz	A. Lenz
12:30-13:30	D. Liventsev	M. Ilgenfritz	A. Khodjamirian	A. Khodjamirian	A. Khodjamirian
13:30 – 15:00	lunch	lunch	lunch	lunch	lunch
15:00-16:00	S. Fajfer	S. Fajfer	D. Blaschke	G. Mitselmakher (CMS)	M. Massera (ALICE)
16:00 – 16:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
16:30 – 17:30	J. Lange	J. Lange	D. Blaschke	F. Barriero (ATLAS)	V. Saleev
17:30 – 18:00	S. Godunov	E. Pozdeeva	C. Pena	A. Bean (Skype lesson)	A. Shipilova
18:00 – 18:30		S. Liebing	D. Cirillo-Lombardo	A. Bean (Skype lesson)	M. Nefedov

## LECTURES

- Ali. A.** *Rare B Decays in the SM & Current Experiments*
- Barriero F.** *The Higgs from ATLAS*
- Bean A.** *Recent CMS results on heavy quarks and hadrons*
- Blaschke D.** *Quarkonia in hot and dense medium*
- Colangelo P.** *1. Holography and QCD  
2. Meson spectroscopy with open charm and beauty*
- Dzyuba A.** *Recent results from LHCb*
- Fajfer S.**  *$B \rightarrow D, D^* \tau \nu_\tau$*
- Faustov R.** *Spectroscopy and Regge trajectories of heavy quarkonia and  $B_c$  mesons*
- Galkin V.** *On weak decays of  $B_s$  mesons  
Scalar glueball-quarkonia mixing in the  $f(0)(1370, 1500, 1710)$  resonances and its implications in the  $J/\Psi$  and scalar charmonium decays*
- Gerasimov S.**
- Grozin A.** *Effective weak Lagrangians in the Standard Model and B decays*
- Hambrock C.** *The multiquark states in the b-quark sector; Form factor determination in  $B \rightarrow K^* \ell^+ \ell^-$ .*
- Ilgenfritz M.** *The Quark Gluon Plasma from Lattice Gauge Theory*
- Ivanov M. A.** *Heavy quark physics in the covariant quark model*
- Kazakov D.** *Lessons of LHC: Higgs boson and Supersymmetry*
- Kidonakis N.** *Top quark production in hadronic collisions*
- Khodjamirian A.** *QCD sum rules in heavy quark physics*
- Koerner J.** *Helicity amplitudes and angular decay distributions*
- Kotikov A.** *Small-x behavior of the structure functions  $F_2$  and  $F_2^c$*
- Kuraev E.** *QCD jets in fragmentation region in pp collisions*
- Lange J.** *X, Y, Z states*
- Lenz A.** *Mixings and CP violation in the B-meson sector*
- Liventsev D.** *Recent results from Belle*
- Lyubovitskij V.** *Light and Heavy Hadrons in AdS/QCD*
- Masera M.** *Recent results from the ALICE collaboration*
- Mitselmakher G.** *The Higgs from CMS*
- Nedelko S.** *Heavy Ion Collisions: Strong Electromagnetic Field as a Trigger for Deconfinement*
- Parkhomenko A.** *Light-Cone Distribution Amplitudes of Bottom Baryons*
- Saleev V.** *Parton Reggeization Approach: Jet and Dijet production at the LHC*
- Santorelli P.** *CP Violation in Non-leptonic Charmed Meson Decays*
- Straub D.** *Rare decays: covering beyond-the-SM theories*

- Surovtsev Yu.** *The scalar mesons in multi-channel  $\pi\pi$  scattering and decays of the  $\psi$  and  $Y$  families*
- Vysotsky M.** *The rise and fall of the fourth quark-lepton generation*
- Tokar S.** *Latest ATLAS results from the flavour physics*

### CONTRIBUTED TALKS

- Astapov K.** *Impact of sgoldstino on Higgs sector physics stay*
- Jäh Ch.** *Evolution equations in mathematical physics. The physical importance of mathematical questions*
- Godunov S.** *Critical nucleus charge in a superstrong magnetic field with the account of a finite nucleus radius.*
- Malyshev M.** *Prompt photon and associated heavy quark production in the  $kT$ -factorization approach*
- Makhaldiani N.** *Renormdynamics, Valence Quarks and Multiparticle Production*
- Nefedov M.** *Heavy quarkonium production at LHC in the NRQCD and parton reggeization approach*
- Pena C.** *Quarkonium production in heavy-ion collisions*
- Pozdeeva E.** *Quark-gluon plasma multiplicity related with AdS space modification*
- Sagun V.** *Bimodality phenomenon in finite and infinite systems within an exactly solvable statistical model*
- Shipilova A.**  *$b$ -jet production at LHC in the parton reggeization approach*
- Rusov A.** *Rare semileptonic decay  $B \rightarrow \pi \ell^+ \ell^-$*
- Trunin A.** *Relativistic corrections to pair charmonium production at LHC*
- Yeletskikh I.** *Modern developments of Quantum Field Theory. Perspectives on space, time, fields and particles*
- Liebing S.** *Can the Lipkin Model for deuteron be expanded to describe composite baryons?*
- D. Cirillo-Lombardo** *Microcanonical ensemble, non-locality and the S-matrix formulation*
- Deka M.** *Quark and Gluon Angular Momenta Contributions to Nucleon Spin*