

Helmholtz International Summer School

”Quantum Field Theory at the Limits: from Strong Fields to Heavy Quarks”

from 22 July 2019 to 2 August 2019, JINR, Dubna

time	Mon, 22	Tue, 23	Wed, 24	Thu, 25	Fri, 26
10:00-11:00	Karbstein	Karbstein	Karbstein	Karbstein	Blaschke
11:00-11:30	break	break	break	break	break
11:30-12:30	Schulze	Schulze	Schulze	Mironov	Mironov
12:30-13:30	Colangelo	Hosaka	Mironov	Kohlfürst	Kohlfürst
13:30-15:00	lunch	lunch	lunch	lunch	lunch
15:00-16:00	Smolyansky	Galkin	Kotikov	Saleev	Melikhov
16:00-16:30	break	break	break	break	break
16:30-17:50	Get together	Excursion	Problem solving	Talk [1-2]	Seminar

time	Mon, 29	Tue, 30	Wed, 31	Thu, 01	Fri, 02
10:00-11:00	Grozin	Grozin	Hanhart	Körner	Faustov
11:00-11:30	break	break	break	break	break
11:30-12:30	Hanhart	Hanhart	Grozin	Ivanov	Blaschke
12:30-13:30	Melikhov	Santorelli	Lyubovitskij	Tran	Closing
13:30-15:00	lunch	lunch	lunch	lunch	lunch
15:00-16:00	Ahmadiniaz	Ahmadiniaz	Ahmadiniaz	Issadykov	
16:00-16:30	break	break	break	break	
16:30-17:50	Talk [3-5]	seminar	talk [6-9]	seminar	

22 July 2019 (Monday), 9:00 Registration (”International Conference Hall”)3rd floor

22 July 2019 (Monday), 9:30 Opening session (”International Conference Hall”) 3rd floor

23 July 2019 (Tuesday), Excursion (Superheavy Elements Fabric, FLNR,JINR)

24 July 2019 (Wednesday), 19:00 Welcome party (Restaurant ”Dubna”, Vekslera 8)

Lectures

Heavy Quarks

1. Hanhart, Christoph (IAS-4 Forschungszentrum Juelich, Germany)
"QCD Exotics in the Heavy Quark Sector" (3 lectures)
2. Schulze, Markus (Humboldt-Uni., Germany)
"Top quark physics" (3 lectures)
3. Grozin, Andrey G. (INP, Novosibirsk, Russia)
"Effective field theories" (3 lectures)
4. Körner, Jürgen G. (Mainz Uni., Germany)
"Radiative electroweak corrections to polarized top quark decays"
(1 lecture)
5. Lyubovitskij, Valery E. (Tübingen Uni., Germany)
"Hadron structure in soft-wall AdS/QCD at zero and finite temperature" (1 lecture)
6. Colangelo, Pietro (INFN-Sezione di Bari, Italy)
"Semileptonic B decays: features, anomalies and challenges"
(1 lecture)
7. Santorelli, Pietro (Napoli Uni., Italy)
"CP violation in the Standard Model, Non-leptonic decays of charmed mesons" (1 lecture)
8. Tran, Chien-Thang (Napoli Uni., Italy)
"The R_D puzzle" (1 lecture)
9. Hosaka, Atsushi (RCNP, Osaka University, Japan)
"Heavy quark baryons" (1 lecture)
10. Faustov, Rudolf N. (RAS, Moscow, Russia)
"Heavy baryon spectroscopy" (1 lecture)
11. Galkin, Vladimir O. (DCC, Moscow, Russia)
"Semileptonic decays of heavy baryons" (1 lecture)
12. Melikhov, Dmitri (SINP, MSU, Russia)
"Rare FCNC B-decays" (1st lecture)
"Analytic Properties of Feynman diagrams in QFT" (2nd lecture)
13. Saleev, Vladimir A. (Samara National Research Uni., Russia)
"Production and decays of b-hadrons and bottomonia at the LHC"
(1 lecture)

14. Kotikov, Anatoly V. (JINR, Dubna, Russia)
"Calculation of massive Feynman diagrams." (1 lecture)
15. Ivanov, Mikhail A.(JINR, Dubna, Russia)
"Nonleptonic decays of doubly charmed baryons" (1 lecture)
16. Issadykov, Aidos (JINR, Dubna, Russia)
"Study of B_c -decays" (1 lecture)

Strong Fields

1. Karbstein, Felix (Helmholtz Institut Jena, Germany)
"The quantum vacuum in strong electromagnetic fields" (3 lectures)
2. Mironov, Arseny (MEPhI, Moscow, Russia)
"Strong Field QED in perturbative and non-perturbative regimes"
(3 lectures)
3. Smolyansky, Stanislav (Saratov State Uni., Russia)
"Back reaction in graphene excited by a strong laser field" (1 lecture)
4. Blaschke, David B. (Wroclaw Uni., Poland & JINR, Dubna, Russia)
"Particle production in strong time-dependent fields" (2 lectures)
5. Kohlfürst, Christian (Helmholtz-Zentrum Dresden-Rossendorf, Germany)
"Photon-Photon Scattering at the high-intensity frontier" (2 lectures)
6. Ahmadienia, Naser (Helmholtz-Zentrum Dresden-Rossendorf, Germany)
"Worldline formalism for amplitude calculations in QED and QCD" (2 lectures)
"One-Particle Reducible Contributions to QED in background fields."
(1 lecture)

Contributed talks

1. Karpishkov, Anton (Samara National Research University, Russia)
"Correlation observables in $Y+D$ associated production at the LHC within the parton Reggeization approach"
2. Shahrba, Mahboubeh (Uni. of Tehran-University of Wroclaw, Poland)
"Phase transition from hyper nuclear matter to color superconducting quark matter under compact stars constraints"
3. Tyulemisov, Zhomart (JINR, Dubna, Russia)
"Strong Δ -isobar decay in covariant quark model"
4. Hanu, Elena-Oana and UDREA, Iuliana Carina (University of Bucharest, Romania)
"Blast-Wave Model for particle identification and elliptic flow in heavy ion collision at high energies"

5. Miloi, Madalina Mihaela (Institute of Space Science-Romania, University of Bucharest, Romania)
"Study of tau-neutrino production at CERN-SPS by nuclear track emulsion technique"
6. Kazemian, Farideh (Shahrood University of Technology, Iran)
"Holographic quark hadron continuity"
7. Dreglici Dragana-Biliana (University of Bucharest, Romania)
"Spectral distribution of laser accelerated protons by multilayer CR-39 nuclear track detectors"
8. Khosravi Largani, Noshad (Alzahra university, Tehran, Iran)
"Chameleon mechanism in inhomogeneous astrophysical objects"
9. Bures, Martin (JINR, Dubna, Russia)
"Space Dimension Dynamics and Modified Coulomb Potential of Quarks - Dubna Potential"