



# Helmholtz International School "Modern Colliders - Theory and Experiment 2018" and Workshop "Calculations for Modern and Future Colliders (CALC2018)"

## Tuesday, 24 July 2018

### CALC2018 Workshop (14:50 - 17:20)

time	[id] title	presenter
14:50	[59] Evaluating `elliptic' master integrals at special kinematic values: using differential equations and their solutions via expansions near singular points	SMIRNOV, Vladimir
15:20	[11] Functional reduction of Feynman integrals	Dr TARASOV, Oleg
15:50	[66] Constraints on epsilon-expansion of "elliptic" integrals.	Dr LEE, Roman
16:20	[0] Feynman Integral evaluation and reduction at supercomputers	SMIRNOV, Alexander

## Wednesday, 25 July 2018

### CALC2018 Workshop (15:35 - 17:05)

time	[id] title	presenter
15:35	[68] The generalized Crewther relation in QCD : is it valid in the proposed recently C-scheme?	Dr KATAEV, Andrei
16:05	[13] QCD description with a lattice-motivated coupling	CVETIC, Gorazd
16:35	[77] Scalar one-loop Feynman integrals in arbitrary space-time dimension	Dr RIEMANN, Tord

## Friday, 27 July 2018

### CALC2018 Workshop (14:50 - 17:00)

time	[id] title	presenter
14:50	[69] The all-loop conjecture for integrands of reggeon amplitudes in N=4 SYM	Dr BORK, Leonid
15:20	[60] Multiloop Baxter equations and Quantum Spectral Curve	Dr ONISHCHENKO, Andrei
15:50	[14] Helicity amplitudes for QCD with massive quarks	Dr OCHIROV, Alexander
16:20	[62] On the Renormalization in Maximally Supersymmetric Gauge Theories	Mr BORLAKOV, Arthur
16:40	[12] Finite-temperature effective potentials in models with extended Higgs sector and critical temperatures	Mr DOLGOPOLOV, Mikhail

## Sunday, 29 July 2018

### CALC2018 Workshop (13:30 - 14:30)

time	[id] title	presenter
13:30	[70] Hypergeometric approach in Feynman Integral calculation	Mr BYTEV, Vladimir
14:00	[61] Rings: a library for asymptotically fast commutative algebra	Dr POSLAVSKY, Stanislav

### CALC2018 Workshop (14:50 - 17:00)

time	[id] title	presenter
14:50	[63] SUSY-like relation in evolution of gluon and quark jet multiplicities	KOTIKOV, Anatoly
15:20	[7] Calculation of the QED contributions to the electron anomalous magnetic moment on graphics processors	Mr VOLKOV, Sergey
15:50	[64] Relation between pole and running heavy quark masses in QCD : $\mathcal{O}(\alpha_s^4)$ level and beyond	Mr MOLOKOEDOV, Victor
16:10	[18] LPPG — Monte-Carlo event generator for experiments at colliders.	Mr YERMOLCHYK, Vitaly
16:30	[15] Supersymmetric Dynamics, Statistical Sums and Zeta-Functions	Dr MAKHALDIANI, Nugzar

# Monday, 30 July 2018

## CALC2018 Workshop (13:30 - 14:30)

time	[id] title	presenter
13:30	[4] NLO and FSR NNLO radiative corrections for Drell-Yan processes at LHC	Dr ZYKUNOV, Vladimir
14:00	[6] Hard photons in proton-antiproton annihilation to a lepton pair for PANDA experiment	Dr BYSTRITSKIY, Yury

## CALC2018 Workshop (14:50 - 17:15)

time	[id] title	presenter
14:50	[17] Search for light dark matter at accelerators	Prof. KRASNIKOV, Nikolay
15:35	[58] Decoding the Nature of Dark Matter in collider and non-collider searches	Prof. BELYAEV, Alexander
16:15	[72] Difficulties of N-body cosmological simulations and the physics of dark matter	Prof. BAUSHEV, Anton
16:45	[73] GW170817: Multi-frequency Observations and Modeling	Dr BARKOV, Maxim

## Tuesday, 31 July 2018

### CALC2018 Workshop (14:50 - 16:20)

time	[id] title	presenter
14:50	[1] Dispersive approach to QCD and its applications	Dr NESTERENKO, Alexander
15:20	[3] On the one-loop calculations in Lipatov's EFT	Mr NEFEDOV, Maxim
15:50	[74] Computing Nuclear Parton Distributions	KULAGIN, Sergey