

**11 October**

- 09:30-09:45** **Registration**
- 09:45-10:00** **Opening**
- 10:00-10:30** **Bounce, genesis: how did the Universe start**  
Valery Rubakov (Institute for Nuclear Research of the Russian Academy of Sciences)
- 10:30-11:00** **Model with an induced spontaneously broken symmetry chain**  
Eduard Boos (Moscow State University, SINP MSU)
- 11:00-11:30** **Coffee**
- 11:30-12:00** **Why quantum field theory in de Sitter space-time is far from being well understood**  
Emil Akhmedov (MIPT and ITEP)
- 12:00-12:30** **QFT without infinities and hierarchy problem**  
Mikhail Shaposhnikov (EPFL) **[Zoom]**
- 12:30-13:00** **Advances in supersymmetric QFT and deautonomization of integrable systems**  
Andrei Marshakov (CAS, Skoltech)
- 13:00-14:00** **Lunch**
- 14:00-14:30** **Multi-loop modularity**  
David Broadhurst (Open University, UK) **[Zoom]**
- 14:30-15:00** **Hidden Sectors for Heterotic Theories and Gaugino Condensation**  
Burt Ovrut (University of Pennsylvania) **[Zoom]**
- 15:00-15:30** **Perturbatively renormalizable quantum gravity**  
Tim Morris (University of Southampton) **[Zoom]**
- 15:30-16:00** **Non-compact duality, super-Weyl invariance and effective actions**  
Sergei Kuzenko (University of Western Australia) **[Zoom]**
- 16:00-16:20** **Group photo**
- 16:20-16:40** **High precision tests of the Standard Model at future e+e- colliders**  
Andrej Arbuzov (BLTP JINR)
- 16:40-17:00** **Neutrino oscillations in quantum field theory and the solar neutrino problem**  
Igor Volobuev (SINP MSU) **[Zoom]**
- 17:00-17:20** **Ultrapерipheral proton-proton collisions at the LHC: survival factor**  
Evgenii Zhemchugov (Lebedev Physical Institute)
- 17:20-17:40** **GPDs in exclusive meson production.**  
Sergey Goloskokov (JINR)
- 17:40-18:00** **Superconformal indices and integrable systems**  
Vyacheslav Spiridonov (BLTP JINR)
- 18:00-19:00** **Welcome party**

## 12 October

- 10:00-10:30** **N=2 supersymmetric higher spins from harmonic superspace**  
Evgeny Ivanov (BLTP JINR, Dubna)
- 10:30-11:00** **Quantum Trace Formulae for the Integrals of the Hyperbolic Ruijsenaars-Schneider model**  
Gleb Arutyunov (Hamburg University) [Zoom]
- 11:00-11:30** **Solving high-energy QCD: 35 years later**  
Gregory Korchemsky (IPhT Saclay) [Zoom]
- 11:30-12:00** **Coffee**
- 12:00-12:30** **On a structure of one- and two loop divergences in 6D maximally extended rigid supersymmetric Yang-Mills theory**  
Ioseph Buchbinder (Tomsk State Pedagogical University)
- 12:30-13:00** **Post-Minkowskian expansion of Gravitational scattering from Scattering Amplitudes**  
Pierre Vanhove (IPhT CEA-Saclay) [Zoom]
- 13:00-14:00** **Lunch**
- 14:00-14:30** **Evaluating five-loop propagators**  
Vladimir Smirnov (Skobeltsyn Institute of Nuclear Physics of Moscow State University) [Zoom]
- 14:30-15:00** **Factorization and Resummation at High Energy beyond the Leading Power**  
Martin Beneke (TU Munich) [Zoom]
- 15:00-15:20** **Regge Limit of Gauge Theory Amplitudes beyond Leading Power Approximation**  
Alexander Penin (University of Alberta) [Zoom]
- 15:20-15:40** **Quantum field theory and bound muons and electrons**  
Andrzej Czarnecki [Zoom]
- 15:40-16:00** **Solution of differential equations for multiloop integrals with Libra package.**  
Roman Lee
- 16:00-16:30** **Coffee**
- 16:30-16:50** **Amplitudes in fishnet CFTs in diverse dimensions.**  
Leonid Bork (ITEP, CFAR VNIIA)
- 16:50-17:10** **Basso-Dixon diagrams.**  
Sergey Derkachov (PDMI)
- 17:10-17:30** **Difference equations and Integrability**  
Andrei Onishchenko (BLTP JINR)
- 17:30-17:50** **Sunrise integrals in terms of elliptic polylogarithms**  
Anatoly Kotikov (JINR)
- 17:50-18:10** **Quantum mechanics of radiofrequency-driven coherent beam oscillations in storage rings**  
Nikolai Nikolaev (Landau Institute for Theoretical Physics) [Zoom]
- 18:10-18:30** **Scattering iteratively with Volodya Smirnov**  
Lance Dixon (SLAC) [Zoom]

13 October

- 10:00-10:30** **Physics with light Goldstino supermultiplet**  
Dmitry Gorbunov (Institute for Nuclear Research of the Russian Academy of sciences)
- 10:30-11:00** **Light dark matter. NA64 experiment**  
Nikolay Krasnikov (Institute for Nuclear Research RAS)
- 11:00-11:30** **Chiral effects in external gravitational field**  
Valentin Zakharov [Zoom]
- 11:30-12:00** **Coffee**
- 12:00-12:30** **Islands and Quantum Explosions of Black Holes**  
Irina Aref'eva (Steklov Mathematical Institute)
- 12:30-13:00** **Primordial Antimatter (Possible Antistars in the Galaxy)**  
Alexander Dolgov (Novosibirsk State University)
- 13:00-14:00** **Lunch**
- 14:00-14:20** **What do we know and what do we not know on analytical structure of 5-loop QCD corrections to analytical structure of D-function and Bjorken sum rule from the generalization of Crewther relation**  
Andrei Kataev (INR RAS)
- 14:20-14:40** **Disentangling hot bosonic two-loop vacuum sum-integrals**  
Andrei Davydychev (Moscow State University)
- 14:40-15:00** **3-Loop Heavy Flavor Corrections to Deep-Inelastic Scattering**  
Johannes Bluemlein (DESY) [Zoom]
- 15:00-15:20** **Three-loop scattering amplitudes in QCD**  
Lorenzo Tancredi [Zoom]
- 15:20-15:40** **The Nicolai map for supersymmetric Yang-Mills theory and application to the supermembrane**  
Olaf Lechtenfeld (Leibniz University Hannover) [Zoom]
- 15:40-16:00** **New classes of dynamical systems with benign ghosts**  
Andrei Smilga (University of Nantes)
- 16:00-16:30** **Coffee**
- 16:30-16:50** **Bringing Yang-Mills Theory Closer to Quasiclassics**  
Mikhail Shifman (Theoretical Physics Institute, University of Minnesota) [Zoom]
- 16:50-17:10** **Flux compactification for the critical non-Abelian vortex and quark masses**  
Alexei Yung (Petersburg Nuclear Physics Institute) [Zoom]
- 17:10-17:30** **Advances in non-relativistic quantum gravity**  
Eric Bergshoeff (University of Groningen) [Zoom]
- 17:30-17:50** **Path Integrals in Quadratic Gravity**  
Vladimir Belokurov (Lomonosov Moscow State University, INR RAS)
- 17:50-18:10** **Exact  $\beta$ -functions in supersymmetric theories and the regularization by higher derivatives**  
Konstantin Stepanyantz (Moscow State University)
- 18:10-18:30** **Gauge Field Theory Vacuum and Cosmological Inflation without Scalar Field**  
George Savvidy
- 19:00-22:00** **Banquet**

14 October

- 10:00-10:30** **Series summation and optical theorem**  
Oleg Teryaev (JINR)
- 10:30-11:00** **Instantons with Quantum Core**  
Alexander Sorin (Joint Institute for Nuclear Research)
- 11:00-11:30** **Matrix and tensor models: recent progress**  
Andrey Mironov (Lebedev Physical Institute, ITEP)
- 11:30-12:00** **Coffee**
- 12:00-12:30** **Present status and the simplest models of the inflationary scenario**  
Alexei Starobinsky (Landau Institute for Theoretical Physics RAS and JINR) **[Zoom]**
- 12:30-13:00** **Higher-Spin Gauge Theory at Mature Age**  
Mikhail Vasiliev (LPI)
- 13:00-14:00** **Lunch**
- 14:00-14:20** **Adler function, Bjorken Sum Rule, the Crewther-Broadhurst-Kataev relation with different fermion representations of the gauge group of order  $O(\alpha_s^4)$  and the  $\{\beta\}$ -expansion**  
Sergey Mikhailov (BLTP, JINR)
- 14:20-14:40** **Two-loop Rational Terms**  
Max Zoller (PSI, Switzerland) **[Zoom]**
- 14:40-15:00** **Loops and expansions**  
Matthias Steinhauser (KIT) **[Zoom]**
- 15:00-15:20** **Functional reduction of Feynman integrals with masses**  
Oleg Tarasov (JINR Dubna, Moscow Region, Russia)
- 15:20-15:40** **Correlators of heavy-light quark currents in HQET: OPE at 3 loops**  
Andrey Grozin (Budker Institute of Nuclear Physics) **[Zoom]**  
Konstantin Chetyrkin (KIT, Germany)
- 15:40-16:00** **From toy models to beta-functions in arbitrary renormalizable QFT**  
Andrey Pikelner (BLTP JINR)
- 16:00-16:30** **Coffee**
- 16:30-16:50** **Predicting the sparticle mass scale in SUGRA models with degenerate vacua**  
Roman Nevzorov (Lebedev Physical Institute of the Russian Academy of Sciences (LPI RAS))
- 16:50-17:10** **Quantization of 2+1 dimensional gravity and problem of central singularity in the BTZ black hole**  
Aleksandr Andrianov (SPbSU)
- 17:10-17:30** **Strings and SUSY breaking**  
Augusto Sagnotti (Scuola Normale Superiore, Pisa, ITALY) **[Zoom]**
- 17:30-17:50** **Optical equations for null strings**  
Dmitry Fursaev (Dubna State University and BLTP JINR)
- 17:50-18:10** **Estimates for transverse single-spin asymmetries in the hard processes at SPD NICA**  
Vladimir Saleev (Samara National Research University)
- 18:10-18:20** **Closing**