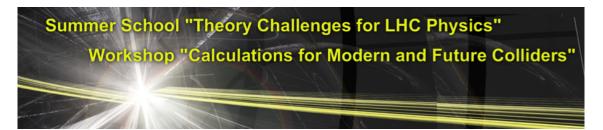
#### **Session Program**

20-30 Jul 2015



# **Theory challenges for LHC physics**

# CALC2015 Workshop

Joint Institute for Nuclear Research, Bogoliubov Laboratory of Theoretical Physics Russia, Dubna, Joliot-Curie 6

# Thursday 23 July

	Massless Propagators and Multiloop QCD: new results
<b>Speaker</b> Konstantin Che	tyrkin
15:00-15:30	Three-loop cusp anomalous dimension in QCD
<b>Speaker</b> Andrey Grozin	
15:30-16:00	Static potential in perturbative QCD: the results and application
<b>Speaker</b> Dr Andrei Katae	۶ <b>۷</b>
16:00-16:20	Coffee break
16:20-16:50	Six loop beta function in φ^4 model
<b>Speaker</b> Mikhail Kompar	niets
	ning strong coupling and b-quark mass in the SM: two-loop k decoupling corrections
Dr Alexander B	ednyakov
17:10-17:30 Speaker	Towards four-loop gauge coupling beta-functions in the SM
Andrey Pikelner	

#### Friday 24 July

14:30-15:00	ation: BLTP JINR, Conference Hall
	Feynman integrals by uniformly transcendental differential equation
Speaker	
Dr Vladimir Sn	nirnov
15:00-15:30	
Reducing d	ifferential equations for multiloop integrals to epsilon form
Speaker Boman Loo	
Roman Lee	
15:30-16:00	FIRE5: a C++ implementation of Feynman Integral REduction
Speaker	
Alexander Smi	rnov
16:00-16:20	Coffee break
16:20-16:40	Functional equations for multiloop Feynman integrals
Speaker	
Dr Oleg Taraso	V
16:40-17:00	Supersymmetric Yang-Mills theory in higher dimensions
Speaker	
Dmitry Vlasen	«o
17:00-17:20	Symmetrical approach to three-body phase space
Speaker	
Speaker	ydychev
Dr Andrei Dav	
· ·	Dynamical gluon mass and linear confinement

# Sunday 26 July

14:30-15:00	Search for BFKL-evolution effects at high energy collisions
<b>Speaker</b> Victor Kim	
15:00-15:30	
β-expansio	n in QCD and generalization of BLM optimization procedure
Speaker	
Andrey Kataev	
15:30-16:00	QCD at high energy and the Parton Reggeization Approach
Speaker	
Vladimir Saleev	V
16:00-16:20	Coffee break
16:20-16:40	
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Pair correla Reggeizatic Speaker Alexandera Shi 16:40-17:00 Diphoton pu Parton Reg Speaker Mr Maxim Nefe 17:00-17:20	ipilova roduction at Tevatron and the LHC in the NLO* approximation of the geization Approach idov Exploring the 3-dimensional structure of the nucleon with QCD
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### Monday 27 July

14:30-15:00 Higgs bosor	ns in SM extensions: temperature effective loop corrections
<b>Speaker</b> Dr Mikhail Dolg	οροίον
15:00-15:30	
A Simple Su of the Elect	btraction Scheme for Calculation of the Anomalous Magnetic Mome ron in QED
<b>Speaker</b> Mr Sergey Volke	v
15:30-16:00	edel independent enclysis of new keeping guarks at the LUC
-	odel independent analysis of new heavy quarks at the LHC
<b>Speaker</b> Luca Panizzi	
16:00-16:20	Coffee break
16:20-16:40	Alternative renormalization group for the standard model
Speaker	
Dr Grigory Pivo	varov
16:40-17:00	Pair production of quarkonia at NLO
Speaker	
Andrei Onishch	enko
17:00-17:20	Resolving Color and Kinematics for QCD Amplitudes
Speaker	
Alexander Ochi	rov
17:20-17:40	
	evolution of dark matter halos: how to fit observational data?
Speaker	
Dr Anton Baush	ev
17 40 10 00	
	or Violation in SUSY SO(10) Theories using Non Universal Gaugino
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17:40-18:00	ev or Violation in SUSY SO(10) Theories using Non Universal Gaugine

# Tuesday 28 July

14:30-15:00	HERAFitter project and its related studies
Speaker	
Ringaile Placak	yte
15:00-15:30	New developments in the MCSANC tool.
Speaker	
Andrey Sapron	ov
15:30-16:00	Beyond NNLL' qT resummation with CuTe
Speaker	
Thomas Luebbe	ert
16:00-16:20	Coffee break
16:20-16:40	Dark vector boson and (g-2) muon anomaly
Speaker	
Mr Nikolay Kras	snikov
16:40-17:00	Efficient calculation with Clifford algebra.
Speaker	
Yahor Dydyshka	a
17:00-17:20	Event generator LePaProGen for the Drell-Yan process
Speaker	
Vitaly Yermolch	iyk
17:20-17:40	
	elopments in the fast reproduction of QCD calculations with the
APPLgrid p	

# Wednesday 29 July

Hadronic co approach t	ontributions to electroweak observables in the framework of disper o QCD
<b>Speaker</b> Dr Alexander N	
15:00-15:30	S-matrix approach to the Z line shape
<b>Speaker</b> Tord Riemann	
15:30-16:00	)
	ty of maximal transcendentality: calculation of master integrals
<b>Speaker</b> Dr Anatoly Kot	ikov
16:00-16:20	Coffee break
16:20-16:40	Massive gluons
Speaker	
Dr Sergey Lari	1
	Taking into account of hard photons in MOLLER experiment
16:40-17:00	
16:40-17:00 <b>Speaker</b> Dr Vladimir Zy	kunov

18:30

Dr Inna Serenkova