

# Advanced School on Modern Mathematical Physics

*Dubna, September 7 - 17, 2008*



## Lectures:

I. Antoniadis (CERN)

*Phenomenology of superstrings and extra dimensions*

I.Ya. Aref'eva (SMI RAS, Moscow)

*Micro black holes and wormholes production at the LHC*

A.T. Filippov (JINR, Dubna)

*Elementary introduction to black holes, cosmology, and waves (integrable model approach)*

P. Fre (Torino University), A.S. Sorin (JINR, Dubna)

*Cosmic supergravity billiards*

E.A. Ivanov (JINR, Dubna)

*Supersymmetry*

D.I. Kazakov, A.N. Baushev (JINR, Dubna)

*Dark matter*

V.A. Naumov (JINR, Dubna)

*Neutrino mass*

V.V. Nesterenko (JINR, Dubna)

*Introduction to string theory*

V.A. Rubakov (INR, Moscow)

*Approaches to baryogenesis*

M.V. Savina, S.V. Shmatov (JINR, Dubna)

*Physical program of LHC*

A.A. Starobinsky (ITP, Moscow)

*Dark energy*

A.V. Toporensky (SAI MSU, Moscow)

*Introductory course on cosmology*