SPD at NICA 2019

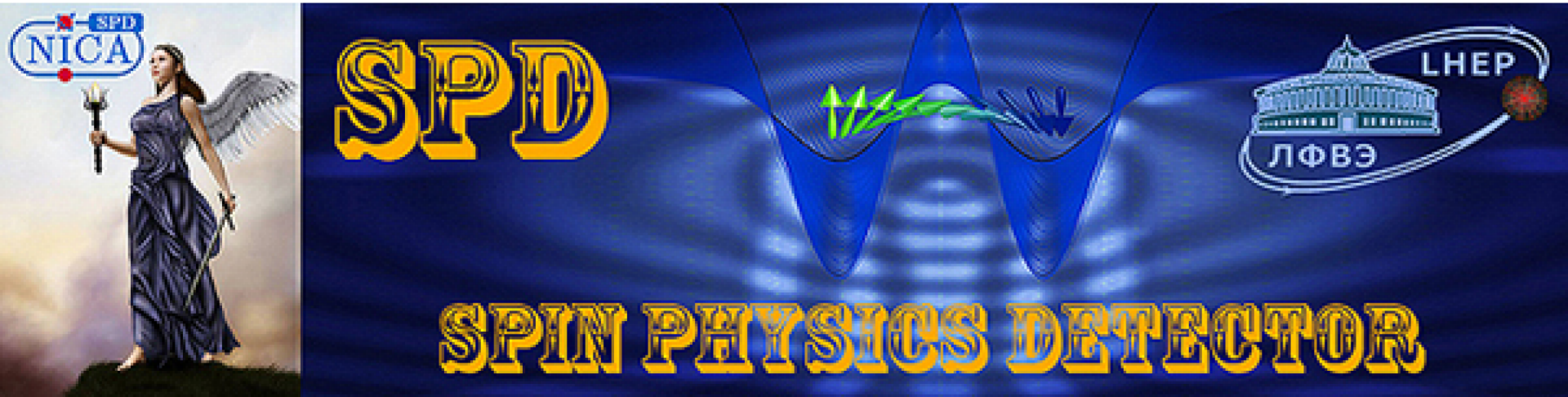
4-8 June 2019, Dubna, Russia

ITEP group presentation

Igor Alekseev (ITEP, Moscow)

People

Akindinov A., Alekseev I., Golubev A., Karkaryan Ye., Kirin D., Kiselev S., Luschevskaya E., Malkevich D., Morozov B., Plotnikov V., Polozov P., Rusinov V., Samigullin E., Stavinskiy A., Sultanov R., Svirida D., Tarkovskyi E., Tyasin V., Zhigareva N.



Activity

- Time of flight detector based on RPC (TOF)
- Spectator neutrons identification very forward detector (ZDC)
- Beam-beam counter detector (BBC)
- Theoretical support of the experiment based on the numerical calculations in lattice quantum chromodynamics
- Research of rare interactions characterized by large transverse momenta of secondary particles in SPD
- Measurement of the NICA collider beams polarization

The activity includes:

- Detector prototyping, testing, production and operation support
- Development and support of the required software for event simulations and data analysis

Experience

- Large experience in development, production and operation of RPCs and scintillator detectors with SiPMs. Our devices operate in Alice (LHC) and Belle experiments.
- Very good practice in FPGA-based DAQs, including several successful experiments in Russia and USA
- ITEP group paritcipate in RHIC&AGS (BNL) polarimetry since 1997 and was engaged in all AGS and RHIC pC polarimeters and in Hjet absolute RHIC polarimeter

Computer infrastructure

- 10000 CPU cores supercomputer
- GRID connection