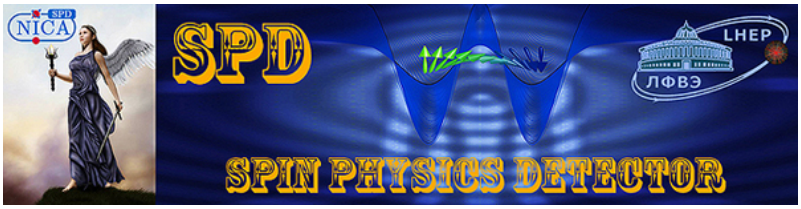
International Workshop “SPD at NICA-2019”



Tuesday 4 June 2019 - Saturday 8 June 2019

Scientific Program

The opportunity to have high luminosity collisions of polarized protons and deuterons in the NICA collider allows for studies of a great variety of spin and polarization dependent effects in hadron-hadron collisions:

Drell-Yan pairs and J/ψ and prompt-photon production with longitudinally and transversely polarized p and d beams aiming at extraction of unknown (poorly known) parton distribution functions;

spin effects in baryon, meson and photon production in various exclusive reactions;

diffractive processes;

multiquark states and correlations;

studies of cross sections, spin asymmetries (Krisch effect) and spin-dependent amplitudes in elastic scattering.

The program of the workshop will consist of three main parts.

The first one will be devoted to the theoretical foundations of the spin physics program at NICA and other experiments where similar research is being conducted, as well as to their experimental results and open problems.

The second part of the meeting will consist of talks on the SPD experimental set-up, status and developments of the detector subsystems, formation and acceleration of polarized beams and measurement and control of the degree of their polarization in the NICA collider.

The third part will focus on setting-up of the SPD Collaboration. Time will be allocated to all groups expressing interest to present their experience, resources and possible areas of participation in the SPD. We expect that *ad hoc* committees will be composed at the workshop with aims to elaborate Constitution of the Collaboration, search for candidates to its governing bodies, etc.