International Workshop on Spin Physics
 - at NICA (SPIN-Praha-2018)



Contribution ID: 20 Type: not specified

Off-shell initial state effects in DY processes at NICA

Monday, 9 July 2018 16:30 (30 minutes)

Precise theoretical and experimental study of angular distributions of Drell-Yan leptons, produced in pp-collisions, demonstrates the important role of initial-state interactions and influence of intrinsic transverse momenta of initial-state partons. If annihilating initial-state quark and anti-quark have transverse momenta they should be off-shell. The one way to preserve gauge-invariance of scattering amplitudes in all orders of perturbative QCD is consideration of initial-state partons as Reggeized partons which are constituents of Lipatov's effective theory. In this talk we present results of calculations of invariant mass, transverse momentum spectra of Drell-Yan lepton pairs and virtual-photon polarization observables in unpolarized pp-collisions at NICA energy which were obtained in the Parton Reggeization Approach. The properties of Boer-Mulders function in PRA and prospects for taking into account the polarization of initial-state protons will be also discussed.

Presenter: Prof. SALEEV, Vladimir (Samara National Research University)

Session Classification: Theory II