



Contribution ID: 3

Type: **not specified**

## Drell-Yan lepton pair production in the kt-factorization approach

*Tuesday, 27 March 2012 16:50 (20 minutes)*

In the framework of the kt-factorization approach, the production of unpolarized Drell-Yan lepton pair at high energies is studied. The consideration is based on the  $O(\alpha)$  and  $O(\alpha\alpha_s)$  off-shell partonic matrix elements with virtual photon and Z boson exchange. The calculations include leptonic decays of Z bosons with full spin correlations as well as  $\gamma$  - Z interference. The unintegrated parton densities in a proton are determined by the Kimber-Martin-Ryskin prescription. Our numerical predictions are compared with the data taken by the D0, CDF and CMS collaborations at the Tevatron and LHC energies. Special attention is put on the specific angular distributions measured very recently by the CDF collaboration for the first time.

**Primary authors:** Dr LIPATOV, Artem (SINP MSU); Mr MALYSHEV, Maxim (SINP MSU); ZOTOV, Nikolay (SINP, Moscow State University)

**Presenter:** Mr MALYSHEV, Maxim (SINP MSU)

**Session Classification:** Hadronic final states

**Track Classification:** Hadronic final states