

# Exclusive production of meson pairs and resonances in proton-proton collisions

Friday, 14 September 2012 11:30 (20 minutes)

## Summary

We shall present results for the exclusive production of  $\pi^+\pi^-$  and  $K^+K^-$  pairs mediated by Pomeron and Reggeon exchanges, which constitute an irreducible background to resonance states (e.g.  $f_0(980)$ ,  $f_2(1270)$ ,  $f_0(1500)$ ,  $\chi_{c0}$ ). We include absorption effects due to proton-proton interaction, pion/kaon rescattering and discuss differences between vectorial and tensorial Pomeron for exclusive diffractive production of mesons. We compare the results with the existing experimental data and present predictions for the RHIC, Tevatron and LHC colliders.

**Primary author:** LEBIEDOWICZ, Piotr (IFJ PAN)

**Co-author:** Prof. SZCZUREK, Antoni (IFJ PAN)

**Presenter:** LEBIEDOWICZ, Piotr (IFJ PAN)

**Session Classification:** Diffraction in Hadron-Hadron Collisions (III)

**Track Classification:** Diffraction in hadron-hadron collisions