

# DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Type: **Plenary talk**

## Forward proton physics at LHC

*Monday, 27 March 2023 10:00 (30 minutes)*

Diffractive phenomena constitute a large fraction of interactions occurring in pp collisions at LHC. Because of their non-perturbative nature, the present understanding is still relatively poor and uncertain. One of the methods to study these processes is forward proton tagging. I will discuss the mechanism of the diffractive processes, recent results, and potential implications. The proton tagging method can be used for measurements of photon-induced processes, in particular, the photon-photon interactions. I will present the physics behind these processes, the experimental status and the lessons we can learn for the strong interactions and for the electroweak sector.

**Participate in poster competition?**

**Submitted on behalf of a Collaboration?**

**Primary author:** STASZEWSKI, Rafał (IFJ PAN Cracow (PL))

**Presenter:** STASZEWSKI, Rafał (IFJ PAN Cracow (PL))

**Session Classification:** Plenaries

**Track Classification:** Plenary sessions