

## Diffraction in hadronic collisions (1/2)

*Monday, 16 May 2022 14:00 (60)*

Diffractive events in hadronic collisions are classes of events characterized by the large interval of rapidity which is devoid of any hadronic activity. Such gaps are called large rapidity gaps, since they often span several units of rapidity. At HERA electron-proton collider, about 10% of events were classified as diffractive. In such events the proton either is scattered elastically or is dissociated into a state with the same quantum numbers, separated from the rest of hadronic activity. Diffraction is very interesting and important phenomenon, since its understanding may shed light into the confinement, low  $x$  parton evolution, including non-linear phenomena, and nuclear shadowing. In these lectures I will present basic introduction to diffraction phenomena, mainly in DIS, both from theoretical and phenomenological perspective and give the prospects for the measurements at the Electron Ion Collider.

Link to the recording:

<https://cernbox.cern.ch/index.php/s/WmEYOJqGVQQrrSi>

Please ask the organizers for the password.

**Presenter(s)** : STAŚTO , Anna (Penn State University, USA)