

## Seminário LIP

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## Diffractive Physics with Forward Proton Tagging at the LHC

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Diffraction has always been an important part of the studies performed in the experiments involving hadron interactions. This is true also for the LHC, where a large community works on both theoretical and experimental aspects of possible diffractive measurements. I will start with a brief introduction to the diffractive physics, including the properties of the Pomeron. Next, some flagship soft (elastic scattering, single, double and central diffracion) and hard (single diffractive and double Pomeron exchange production of dijets, photon+jet, jet-gap-jet and W/Z bosons) processes will be discussed. I will also mention a special case: the exclusive events. Then, the special devices used for the scattered proton measurement - the forward detectors - will be described. Finally, I will list the special LHC runs, taken during Run 1 and Run 2, and devoted for diffractive measurements.

Local: Sala de Seminários (311) LIP, Av. Prof. Gama Pinto, Nº 2, 1649-003 Lisboa https://indico.lip.pt/event/573/ (Café e bolinhos 30 min antes) O evento terá transmissão por streaming: URL: https://videocast.fccn.pt/live/lip/seminarios PIN: LIP-seminario-2019-04-17