



ID de Contribution: 145

Type: Non spécifié

## Search for new phenomena in low-mass diphoton final states with proton–proton collisions collected at $s=\sqrt{13}$ TeV with the ATLAS detector

*jeudi 3 décembre 2020 16:30 (30 minutes)*

The Higgs boson discovery by ATLAS and CMS collaborations relied mainly on resonance searches in two different channels, one of them being the diphoton channel. Since then, both experiments have extended the resonance search range towards lower and higher diphoton invariant masses up to limits driven by experimental limitations.

This talk focuses on a novel diphoton resonance search in the invariant mass range below 60 GeV using all Run2 data from pp collisions collected with the ATLAS detector at the Large Hadron Collider. Some perspectives on future analyses in the same mass region will be discussed.

**Auteur principal:** PASCUAL DOMINGUEZ, LUIS (LPNHE)

**Orateur:** PASCUAL DOMINGUEZ, LUIS (LPNHE)

**Classification de Session:** Theme 9