## Searches for resonances decaying to pairs of Higgs bosons in ATLAS

Tuesday 5 November 2024 15:40 (20 minutes)

Several physics scenarios beyond the Standard Model predict the existence of new particles that can subsequently decay into a pair of Higgs bosons. This talk summarises ATLAS searches for resonant HH production with LHC Run 2 data. Several final states are considered, arising from various combinations of Higgs boson decays.

## **Primary track**

## Is the speaker a PhD student or post-doc?

No

Presenter: CHEN, Maggie (University of Oxford (GB))

Session Classification: Higgs boson pairs and Higgs potential 2 - sal IX

**Track Classification:** Higgs boson pairs and Higgs potential (including electroweak phase transitions and connections to cosmology)