



Contribution ID: 106

Type: **Parallel session talk**

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

*Monday 21 August 2023 16:50 (15 minutes)*

Several physics scenarios beyond the Standard Model predict the existence of new particles that can subsequently decay into a pair of Higgs bosons. These include pairs of SM-like Higgs bosons (HH) as well as asymmetric decays into two scalars of different masses (SH). This talk summarises ATLAS searches for resonant HH and SH production with LHC Run 2 data. Several final states are considered, arising from various combinations of Higgs boson decays.

### Collaboration / Activity

ATLAS

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**Session Classification:** T10 Searches for New Physics

**Track Classification:** Searches for New Physics