

Reinterpreting the LHC diboson searches

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Searches for diboson resonances now form a major component of the ATLAS exotics and CMS B2G and (BSM) Higgs search programs. These analyses are designed to search for new massive resonances (between around 200 GeV and 4 TeV), produced directly and on threshold with very little p_T , decaying into pairs of W, Z or Higgs bosons which may be highly boosted and which may decay into various combinations of hadronic and leptonic final states. Depending on kinematic and substructure selection criteria, these searches are often also sensitive to equally well motivated resonance cascades with non-trivial decay topology and possibly with fat jets resulting from boosted BSM objects in the final state. In this talk I will discuss some of the subtleties involved in recasting and reinterpreting these searches in terms of a broader class of new physics models.

Presentation

Talk given in person

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