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New Physics in Diboson Channels at High Invariant Mass

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Thus far, the LHC has not discovered any new resonances with the notable exception of the SM-like Higgs boson. Nevertheless, if New Physics states (i.e., new states beyond the SM) exist but are out of reach for the LHC or even a future collider with a higher center-of-mass (CoM) energy, these resonances can manifest themselves in the growth with partonic CoM energy of certain amplitudes below their mass scale. In this talk, I will review a particularly promising set of channels – the diboson channels – where such effects can be used to place bounds on (or, optimistically, observe deviations in) the operators that are generated from integrating out new resonances. In particular, I will discuss the interplay between the WZ, Zh, and Wh channels in order to break flat directions in the Likelihood function.

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