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Evaluation of the significance of a scalar candidate at 95 GeV at the LHC

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Motivated by an excess around 95 GeV in the LEP data, we evaluate several excesses around that mass that have emerged in recent years at the Large Hadron Collider (LHC). Results from the CMS and ATLAS collaborations have shown that there is a scalar at around that mass, we combine the results from both collaborations for when the scalar decays into $\gamma\gamma$, $\tau\tau$, and WW to analyze the significance. The potential connection of this scalar candidate with the multi-lepton anomalies at the LHC is discussed.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

MSc

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