

CP-sensitive observables of a hypothetical heavy spin-0 particle with the dominant $\gamma\gamma$ and $Z\gamma$ -interaction.

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We study observables sensitive to tensor structure of interactions of a hypothetical heavy spin-0 boson. It is assumed that interactions of this particle are dominated by interactions with photons. The interactions with other vector bosons and quarks are supposed to be suppressed. The above assumptions favor the production of this hypothetical particle through the vector boson fusion mechanism structurally dominated by the photon and Z-interactions. This particle will be produced in association with two light quarks. It is shown that the azimuthal angle difference between the tagging jets provides an observable to probe the tensor structure of the interaction vertices of such hypothetical particle.

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