

# Decays of the tensor glueball in a chiral approach

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Glueballs remain an experimentally undiscovered prediction of QCD. Lattice QCD predicts a spectrum of glueballs, with the tensor ( $J^{PC} = 2^{++}$ ) glueball being the second lightest, behind the scalar glueball. From an effective field theory based on spontaneous and explicit chiral symmetry breaking, we compute branching ratios of the tensor glueball into various meson decay channels. We find the tensor glueball to primarily decay into 2 vector mesons, dominated by  $\rho\rho$  and  $K^*K^*$ . These results are compared to experimental data of decay rates of spin 2 mesons. Based on this comparison we make statements on the eligibility of these mesons as potential tensor glueball candidates.

## Collaboration

**Primary authors:** VEREIJKEN, Arthur (Jan Kochanowski University of Kielce); GLACOSA, Francesco (Jan Kochanowski University of Kielce); PIOTROWSKA, Milena (Jan Kochanowski University of Kielce); JAFARZADE, Shahriyar

**Presenter:** VEREIJKEN, Arthur (Jan Kochanowski University of Kielce)

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