## 27th International Symposium on Particles, Strings and Cosmology



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## Gegenbauer's Twin

Tuesday 26 July 2022 16:00 (18 minutes)

Higgs precision measurements and resonance searches at the LHC have made sharper than ever the electroweak naturalness problem. In response, the particle physics community has begun to question symmetry-based solutions. We provide a new perspective by proposing a symmetry-based framework which does not require any fine-tuning to comply with current experimental observations. This is achieved by abandoning the additional constraint of minimality typically imposed on the structure of symmetry breaking. Single-Higgs coupling deviations of a few percent and trilinear self-coupling deviations of order one are irreducible in the natural parameter space.

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