

## Different Interaction Models in Strong Decays of Negative Parity $N^*$ Resonances Under 2 GeV

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**Abstract:** In this paper, by using harmonic-oscillator wave functions of different interaction models, i. e. OPE (one-pion-exchange model), OPsE (only pseudoscalar meson exchange model), the extended GBE (Goldstone-boson-exchange model including vector and scalar mesons), and OGE (one-gluon-exchange model), we calculate and compare the strong decays of negative parity  $N^*$  resonances under 2 GeV. We find that the conventional mixing angles are correct, and GBE and OGE are obviously superior to OPE and OPsE.

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Key words: interaction models, strong decay,  $N^*$  resonance

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