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Pentaquark Mass and Structure TERRY GOLDMAN,
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jing Normal University — The Extended Quark Delocalization, Color
Screening Model reproduces ground state baryons and the deuteron with
good accuracy. The model includes all meson exchange contributions to
hadronic interactions using explicit pions and quark wavefunctions dis-
torted from their configurations in isolated baryons. We apply the model
to calculate the masses of pentaquark states for various structures. A
tetrahedral configuration of light quarks centered on the strange anti-
quark is found to have a lower mass than the configurations proposed
by both Jaffe-Wilczek and Lipkin-Karliner for the Θ^+ .

Prefer Oral Session
 Prefer Poster Session

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