

Abstract Submitted
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Superunification at local high energy thresholds JOSEPH TOWE

— It is postulated that supergravitational interactions interface with SM physics at local high energy thresholds, which are characterized by a partially broken version of $E_8 \times E_8$. The proposed threshold symmetry assigns specific quantum numbers to fields of spin 2 and spin 3/2 that are indicated by locally supersymmetric Lagrangians, and in this context, SUGRA interactions at the postulated high energy thresholds produce quark-lepton transitions or additional quark triplets (excited baryon states). Baryon structure is preserved, and only one exotic particle is required: a left handed (non-strange) version of the strange quark.

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