

Mass dimension one fermions: Recent progress

Mass dimension one fermions are a new class of spin-half particles that are physically distinct from the Dirac fermions. They satisfy the Klein-Gordon but not the Dirac equation. They have mass dimension one instead of three-half thus endowing them with a renormalizable quartic self-interaction. Here, we report the recent progress of the theory as elucidated in **Phys.Rept. 967 (2022) 1-43**. We focus on the kinematics of the fermions, present the new S-matrix formalism and the generalised unitarity relation.

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Session Classification: Parallel Session X(1): TeV and BSM Physics

Track Classification: TeV 物理和超出标准模型新物理