

Supersymmetric U(1) Gauge Field Theory with Massive Gauge Field

WU Ning

Institute of High Energy Physics, P.O. Box 918-1, the Chinese Academy of Sciences, Beijing 100039, China

(Received: 2001-9-3; Revised:)

Abstract: A new mechanism to introduce the mass of U(1) gauge field in supersymmetric U(1) gauge theory is discussed. The model has the strict local U(1) gauge symmetry and supersymmetry. Because we introduce two vector superfields simultaneously, the model contains a massive U(1) gauge field as well as a massless U(1) gauge field.

PACS: 11.30.Pb, 12.60.J, 11.15.-q

Key words: supersymmetry, gauge symmetry, gauge field, mass

[\[Full text: PDF\]](#)

Close