

Yu, Yao; Zheng, Sibó

Oblique corrections in the mssm at one loop II: fermions. (English) Zbl 1260.81306
Mod. Phys. Lett. A 28, No. 1, Paper No. 1250238, 10 p. (2013).

Summary: This paper is the completion of the authors earlier work [[arXiv:1207.4867](https://arxiv.org/abs/1207.4867)] which involves the derivation of oblique corrections in the MSSM at one-loop. In terms of the two-component spinor formalism, which is new in comparison with those used in the literature, the contributions arising from the fermion superpartners, i.e., neutralino-chargino sector to self-energy of Standard Model electroweak gauge bosons are calculated. Corresponding descendants the S , T and U parameters are presented. The validity of our results is examined in two ways, which are then followed by detailed analysis on the results in the literature.

MSC:

[81V22](#) Unified quantum theories
[81T60](#) Supersymmetric field theories in quantum mechanics

Cited in 1 Document

Keywords:

[supersymmetry phenomenology](#); [precision test](#)

Full Text: [DOI](#) [arXiv](#)

References:

- [1] DOI: 10.1103/PhysRevD.46.381 · [doi:10.1103/PhysRevD.46.381](#)
- [2] DOI: 10.1103/PhysRevLett.65.964 · [doi:10.1103/PhysRevLett.65.964](#)
- [3] DOI: 10.1016/j.physrep.2010.05.002 · [doi:10.1016/j.physrep.2010.05.002](#)
- [4] DOI: 10.1016/0550-3213(79)90605-9 · [doi:10.1016/0550-3213\(79\)90605-9](#)
- [5] DOI: 10.1016/0550-3213(79)90234-7 · [doi:10.1016/0550-3213\(79\)90234-7](#)
- [6] DOI: 10.1103/PhysRevD.45.1725 · [doi:10.1103/PhysRevD.45.1725](#)
- [7] DOI: 10.1007/s100529800993 · [doi:10.1007/s100529800993](#)
- [8] DOI: 10.1016/S0550-3213(96)00683-9 · [doi:10.1016/S0550-3213\(96\)00683-9](#)

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.