

QCD corrections to squark production in e^+e^- Annihilation in the MSSM with complex parameters

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Abstract: We discuss the pair production of scalar quarks in e^+e^- annihilation within the MSSM with complex parameters. We calculate the SUSY-QCD corrections to the cross section $\sigma(e^+e^- \rightarrow q_i \bar{q}_j)$ ($i, j=1, 2$) and show that the effect of the CP phases of these complex parameters on the cross section can be quite strong in a large region of the MSSM parameter space. This could have important implications for squarks searches and the MSSM parameter determination in future collider experiments. ?? Springer Science+Business Media, LLC 2007.

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