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Elucidating SUSY in the Interplay of LHC and ILC

While the current 7/8 TeV results form the LHC excludes highly constrained SUSY models with a light sparticle spectrum, less constrained models
are still viable. Certain such models promise both discovery of coloured sparticles during the upcoming 14 TeV run of the LHC, and a rich spectrum of non-coloured states, accessible at the ILC. LHC might or might not give a hint to the existence of these electro-weak states, but
only at the ILC can measurements with sufficient precision be done to elucidate the details of the model. This contribution discusses how
the combined observations from LHC and ILC can be used to determine MSSM parameters in models with large numbers of free parameters. We illustrate the possible interplay between measurements at ILC and LHC by a concrete example, compatible with all current constraints. It is a full
SUSY model which features a small stau-LSP mass difference, and quite heavy coloured particles. The model has been studied using detailed detector simulation of both LHC and ILC detectors.

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