

# Event shape discrimination of supersymmetry from large extra dimensions at a linear collider

*Sunday, 12 March 2006 15:10 (25 minutes)*

The production of a charged lepton ( $\ell = e, \mu$ ) pair with a large missing energy at a linear collider is discussed as a means of distinguishing the minimal supersymmetry (MSSM) scenario from that with large extra dimensions (ADD) for parameter ranges where the total cross-sections are comparable for both. Analyses in terms of event shape variables, specifically sphericity and thrust, are shown to enable a clear discrimination in this regard.

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**Session Classification:** New Physics at TeV Scale and Precision Electroweak

**Track Classification:** New Physics at TeV Scale & Electroweak Precision Test