

**MODEL-DEPENDEND SEARCHES FOR Z' BOSON
IN ANNIHILATION LEPTONIC PROCESSES
AT THE ILC WITH IMPROVED ACCURACY**

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We present an approach to amplify possible Z' signal in leptonic annihilation processes in the context of the ILC experiment. We construct an observable by weighted integration of the differential cross section for

a bunch of Z' models: the Sequential Standard Model, the models which are based on the E_6 gauge group, the Left-Right Symmetric model, the Alternative Left-Right model, the Littlest Higgs model, and the Simplest Little Higgs model. The weight function for angular integration of the cross section is determined from the condition of maximal signal with respect to the statistical uncertainty. Since we neglect the Z - Z' mixing, the observable allow to measure the only free parameter in every model under consideration, the Z' mass, with the highest possible precision. As a result, we improve Z' exclusion reaches at the ILC.