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The ILC physics program at energies above 250 GeV

Thursday 16 May 2024 14:52 (12 minutes)

The International Linear Collider is proposed e+e- collider with a staged approach to reach high energies. The accelerator is based on a mature design that can deliver high luminosity and uses polarized beams. The first stage will be a Higgs Factory, with collisions at 250 GeV that allows measurements of Higgs boson couplings comparable to that of circular e+e- colliders.

A second stage will include a brief program at 350 GeV to measure the top quark mass at threshold, and then move on to a center of mass energy of 500 GeV or somewhat above. This stage offers an independent set of measurements of the Higgs boson couplings, together with new capabilities: measurement of the top quark Yukawa coupling, measurement of Higgs pair production, and measurement of the top quark form factors to a precision at which beyond-Standard Model effects would be expected. This talk will describe the physics program at energies higher than 250 GeV.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

Presenter: STRUBE, Jan Session Classification: Minisymposium