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ILD for the International Linear Collider

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The International Large Detector (ILD) is a detector concept for the International Linear Collider (ILC), a high-luminosity linear electron-positron collider with an initial center-of-mass energy of 250 GeV (extendable to 1 TeV). The ILD is optimized with the concept of particle flow for overall event reconstruction so that it will deliver excellent performance for high-precision Higgs and top measurements, as well as high-sensitivities for possible new phenomena, utilizing the advantages of an electron-positron collider. Particle flow implies that all particles in an event, charged and neutral, are individually reconstructed. This requirement has a large impact on the design of the detector, and has played a central role in the optimisation of the system. Superb tracking capabilities and outstanding detection of secondary vertices are other important aspects. The overall layout, sub-detector technologies, expected performance, and recent progress of the ILD will be presented.

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