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The SiD Detector for the International Linear Collider

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The SiD Detector is one of two validated detector designs for the future International Linear Collider. SiD features a compact, cost-constrained design for precision Higgs and other measurements, and sensitivity to a wide range of possible new phenomena. A robust silicon vertex and tracking system, combined with a 5 Tesla central solenoidal field, provides excellent momentum resolution. The highly granular calorimeter system is optimized for Particle Flow application to achieve very good jet energy resolution over a wide range of energies. Details of the proposed implementation of the SiD subsystems, as driven by the physics requirements, will be given. Integration with the accelerator, the push-pull mechanism, and the detector assembly procedures at the Kitakami site will be described, together with the estimated timeline for construction in relation to the overall ILC Project.

Experimental Collaboration

SiD Detector Consortium

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