Contribution ID: **94** Type: **not specified**

The SiD Detector concept Input to the European Strategy Process Update 2026

The SiD Detector is one of two detector designs validated in 2012 for the International Linear Collider (ILC). SiD features a compact, cost-constrained design for precision Higgs and other measurements, with sensitivity to a wide range of possible new phenomena. A robust silicon vertex and tracking system, combined with a five 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. Given the advances in detector technology and the current set of three linear collider concepts under consideration, the SiD team is reviewing its earlier design and technology decisions and updating the design and choices with recent technological advances. For each area of SiD development R&D topics and opportunities for participation will be discussed.

Authors: Prof. WHITE, Andrew (U. Texas at Arlington); Dr VERNERI, Caterina (SLAC); Prof. YAMAMOTO, Hitoshi (Tohoku University); Prof. BRAU, James (U. Oregon); Dr STRUBE, Jan (U. Oregon); Dr STANITZKI, Marcel (DESY); Dr BREIDENBACH, Martin (SLAC); Prof. BURROWS, Philip (Oxford University); Dr MARKIEWICZ, Thomas (SLAC)