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## SiD Analyses for Snowmass Physics Lols: Status and Plans

*Tuesday, 16 March 2021 06:00 (20 minutes)*

The US Particle Physics Community Planning Exercise (aka Snowmass), sponsored by the APS Division of Particles and Fields, provides an opportunity for particle physicists in the US, together with international partners, to build consensus on possible future projects and explore their potential scientific reach. The Silicon Detector (SiD) is one of two mature detector concepts proposed for the International Linear Collider (ILC). Several physics analyses inspired by Snowmass Letters of Interest (LoIs) are underway to explore the SiD precision measurement of the Higgs boson: Higgs to invisible, Higgs to long-lived particles with displaced decay vertices, Higgs CP properties, and the Higgs self-coupling. Variations of the tracking, vertexing and calorimetry are envisioned in order to estimate their impact on sensitivity to these important Higgs properties.

### Time Zone

Americas

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