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Tracking for the modified ILD detector concept at the FCCee

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The ILD detector concept has originally been developed for the International Linear Collider (ILC). Detailed simulations gauged against the performance of prototype components have shown that ILD in its ILC incarnation is ideally suited to pursue the physics program of a linear Higgs factory as well as of a higher energy e⁺e⁻ collider. Recently, the ILD collaboration has started to investigate how the detector concept would need to be modified in order to operate successfully in the experimental environment of a circular Higgs factory like for instance FCCee. In particular, the interaction region, or machine-detector interface (MDI), requires substantial changes to make room for accelerator elements and to withstand backgrounds. This contribution presents the progress in the adapted reconstruction to account for the modified tracking detectors and enable the assessment of the modified detector design in background and physics performance studies.

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