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Conformal tracking for the CLIC detector

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Conformal tracking is the novel and comprehensive tracking strategy adopted by the CLICdp Collaboration. It merges the two concepts of conformal mapping and cellular automaton, providing an efficient pattern recognition for prompt and displaced tracks, even in busy environments with 3 TeV CLIC beam-induced backgrounds. In this talk, the effectiveness of the algorithm will be shown by presenting its performances for the CLIC detector, which features a low-mass silicon vertex and tracking system. Moreover, given its geometry-agnostic approach, the algorithm is easily adaptable to other detector designs and interaction regions, resulting in successful performances also for the CLIC detector modified for FCC-ee.

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