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Strategy for Particle Physics: Opportunities for South Africa

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The field of collider particle physics is at a pivotal juncture, with global debates intensifying over the direction of future accelerators and large-scale international collaborations. As the scientific landscape continues to evolve, it is imperative for the global particle physics community to refine its strategic priorities and align around shared goals. The European Strategy for Particle Physics, last updated in 2020, is slated for revision in 2026, providing a timely opportunity for reflection and repositioning. While the High-Luminosity LHC defines the short- to mid-term horizon, proposed next-generation electron-positron colliders—including the ILC, FCC-ee, and CEPC—stand as prominent contenders for the future. Additionally, new bridge projects and alternative accelerator concepts are gaining traction, particularly at CERN. This talk will review the current global landscape and explore how South Africa can strategically position itself within these developments, highlighting potential avenues for participation, leadership, and impact in the next era of particle physics.

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