

UCLA Department of Physics & Astronomy

COLLOQUIUM

Thursday, November 20th, 2025 at 4 p.m.

PAB 1-434

Choosing to Collide

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We plan to construct the next generation of colliders because there is new fundamental knowledge to be gained at the energy frontier — knowledge about both the Standard Model itself and the more fundamental theory that underlies it. I'll survey the triumphant role of colliders in building the Standard Model, the main open questions now facing particle physics, and the profound motivation these questions provide for successors to the Large Hadron Collider. Among these successors, I'll devote particular attention to two proposals that have emerged from recent decadal surveys in Europe and the US: CERN's Future Circular Collider program and a high-energy muon collider potentially sited at Fermilab.