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Discovering LFV at a Future Muon Collider: A SMEFT Approach

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The strongest current bounds on lepton flavor violation (LFV) come primarily from low energy precision observables. While these experiments are expected to improve substantially in the next decade, there are cases where a muon collider could complement existing searches. In this talk, we utilize a SMEFT approach to explore the complementarity of muon colliders with low energy experiments for exploring LFV. We find a muon collider could probe regions of parameter space beyond what is explored with low energy experiments, including blind spots that low energy experiments are not sensitive to.

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