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**Intense Stopping Muon Beams**[1] CARY YOSHIKAWA, CHARLES ANKENBRANDT, KATSUYA YONEHARA, DAVID NEUFFER, Fermilab, ROBERT ABRAMS, MARY ANNE CUMMINGS, ROLLAND JOHNSON, Muons, Inc. — The study of rare processes using stopping muon beams provides access to new physics that cannot be addressed at energy frontier machines. The flux of muons into a small stopping target is limited by the kinematics of the production process and by stochastic processes in the material used to slow the particles. Innovative muon beam cooling techniques are being applied to the design of stopping muon beams in order to increase the event rates in such experiments. Such intense stopping beams will also aid the development of applications such as muon spin resonance and muon-catalyzed fusion.

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