Low-energy muons via frictional cooling

Yu Bao, Allen Caldwell, Daniel Greenwald, Guoxing Xia

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Low-energy muon beams are useful for a range of physics experiments. We consider the production of low-energy muon beams with small energy spreads using frictional cooling. As the input beam, we take a surface muon source such as that at the Paul Scherrer Institute. Simulations show that the efficiency of low energy muon production can potentially be raised to 1%, which is significantly higher than that of current schemes.

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