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Abstract for an Invited Paper
for the SES21 Meeting of
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Superfluid Effective Field Theory for Dark Matter Direct Detection¹

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I will present an effective field theory (EFT) framework for superfluid ^4He to model the interactions among quasiparticles, helium atoms and probe particles. The presented EFT framework and results can be used to understand the dynamics of thermalization in the superfluid, and can be further applied to sub-GeV dark matter direct detection with superfluid ^4He .

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