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**Superfluid vortices in dense quark matter** S KUMAR MALLAVARAPU, MARK ALFORD, ANDREAS WINDISCH, Washington University in St.Louis, TANMAY VACHASPATI, Arizona State University — Superfluid vortices in the color-flavor-locked (CFL) phase of dense quark matter are known to be energetically disfavored as compared to well-separated triplets of semi-superfluid color flux tubes. In this talk we will provide results which will identify regions in parameter space where the superfluid vortex spontaneously decays. We will also discuss the nature of the mode that is responsible for the decay of a superfluid vortex in dense quark matter. We will conclude by mentioning the implications of our results to neutron stars.

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