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Phase and amplitude fluctuations for the $l = 2$ Pomeranchuk instability in two dimensions. JORGE QUINTANILLA, ISIS facility, Rutherford Lab. (U. K.), MASUDUL HAQUE, Utrecht University, the Netherlands — For a two-dimensional fermionic system, we analyze models that produce shape-distortion instabilities of the Fermi surface in the $l = 2$ channel, leading to a non-Fermi liquid with nematic order. The finite-temperature phase diagram contains a transition of the Kosterlitz-Thouless type and a crossover at higher temperatures, corresponding respectively to the disordering of phase and amplitude degrees of freedom.

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