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Topological Terms in the effective action of the two dimensional $p_x + ip_y$ superfluid/superconductor RAHUL ROY, MICHAEL STONE, University of Illinois, Urbana Champaign — The effective action of a two dimensional $p_x + ip_y$ superfluid/superconductor, such as the layered Sr₂RuO₄ superconductor or a thin film of ³He-A is known to contain a Hopf term, which is responsible for non abelian statistics. We study the applicability of the Eilenberger formalism which is used to reduce higher dimensional problems to effective one dimensional ones, in computing the effective action. We also investigate the Wess Zumino Witten model in this connection.

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