

Abstract Submitted  
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**Possible correlation-driven odd-parity superconductivity in  $\text{LaNi}_{7/8}\text{Co}_{1/8}\text{O}_3$  (111) bilayers** BING YE, ANDREJ MESAROS, YING RAN, Boston College — Using the functional renormalization group technique we demonstrate a route for potentially high temperature odd-parity superconductivity in ferromagnetic materials caused by repulsive electron interactions, where the superconducting pairing is driven by charge-density wave fluctuations. Our model is directly applicable to a lightly cobalt-doped  $\text{LaNiO}_3$  bilayer grown in the (111) direction. As the on-site repulsive interaction grows, a charge-density wave state with a charge pattern that respects all point-group symmetries of the bilayer is replaced by a superconducting state with an f-wave pairing.

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