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**Origin of chiral p-wave pairing in even-denominator fraction quantum Hall effect** YUAN-MING LU, Department of Physics, Boston College, YUE YU, Institute of Theoretical Physics, Chinese Academy of Sciences, ZIQIANG WANG, Department of Physics, Boston College — We show that gauge field fluctuations in the composite fermion field theory can be exactly integrated out using a non-unitary transformation. An instantaneous statistical interaction is induced which makes the Fermi sea unstable to chiral p-wave pairing. We show that the paired state is a Moore-Read Pfaffian and discuss the effects of Coulomb interaction in connection to even-denominator fractional quantum Hall effect.

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