Assume field R is non-critical.

- Fermion ψ, transforming as a gauge SU(2) fundamental, with dispersion $\varepsilon_{\mathbf{k}}$ from the band structure, at a non-zero chemical potential: has a "large" Fermi surface.

- A SU(2) gauge boson.

- A real Higgs field, H, transforming as a gauge SU(2) adjoint, carrying lattice momentum (π, π). Condensation of the Higgs breaks $\mathrm{SU}(2) \to \mathrm{U}(1)$, and transforms the large Fermi surface to a small Fermi surface.