

- The quantum critical theory is the Higgs transition where the gauge “symmetry” breaks from $SU(2)$ down to $U(1)$, in the presence of a Fermi surface of fermions carrying fundamental $SU(2)$ charges.
- The Higgs condensation does not give the fermions a “mass”; instead it reconstructs the Fermi surface from *large* to *small*.
- The quantum phase transition has no gauge-invariant “order parameter”, and it does not break any global symmetries.