

- Identify charge carriers: electrons near the Fermi surface. Compute the scattering rate of these charged excitations off the bosonic ϕ fluctuations.
- Analogous to electron-phonon scattering in metals, where we have “Bloch’s law”: a resistivity $\rho(T) \sim T^5$.
- “Bloch’s law” for the Ising-nematic critical point yields $\rho(T) \sim T^{4/3}$.
- However, Bloch’s law ignores conservation of total momentum, or **phonon drag**.
- The field theory for the Ising-nematic critical point has strong electron– ϕ scattering, and no quasi-particle excitations. Nevertheless, because of the central importance of the analog of phonon drag, it has $\rho(T) = 0$.