Symmetry Classification and Field Theories for Disordered Systems Prof. Alex Altland

Prerequisites: Statistical field theory, e.g., condensed matter field theory book by Mehran Kardar or Altland & Simons.

Plan of lectures:

- General intro to disorder/symmetries
- Symmetry classification
- Symmetries/Random Matrix Theory + understanding RMT results in heuristic terms from diagrams
- Field theory construction
- Applications, time permitting: superconductivity and topological insulators