Topological quantum numbers in condensed matter systems

Organization

- 2V+U re-interpreted
- Every (more or less) three weeks: assignment to be solved in class in three hours.
- Questions: don't wait for the break!
- Notes? How many printed copies?
- https://cmt-qo.phys.ethz.ch/teaching/tqn

Symmetry protected topological phases

Topological band insulators

Topological superconductors





A dramatic observation





von Klitzing PRL1980

Even more dramatic



Tsui et al. PRL1982

Even more dramatic

