

June 16 (Mon.) 11:00 – 12:00

## **Dynamic effects in topological insulator/superconductor**

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Defects in topological insulators (note, not necessarily free-particle band insulator type) or superconductors possess non-trivial quantum numbers. The condensation of these defects destroy the parent topological insulating/superconducting state and converts the system to other states of matter whose property depend on the quantum number of the defects. Interestingly, many examples of these type of defect are related to the soliton of the 1D Dirac equation studied by Jackiw and Rebbi more than quarter of a century ago. In the talk this interesting relation will be discussed and two examples where defect condensation gives rise to interesting phase transition will be given.