Topological transport phenomena in strong and electroweak matter

Wednesday 13 July 2016 12:00 (45 minutes)

Chirality of fermions has a topological nature. This microscopic property modifies the macroscopic hydrodynamic behavior and leads to unusual transport phenomena protected by topology in relativistic systems. We show how conventional kinetic theory should be modified to take into account such effects. We also discuss their potential importance in strong and electroweak matter, and, in particular, in the evolution of supernovae.

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