

Topological Superconductors

Masatoshi Sato

Department of Applied Physics, Nagoya University

msato@nuap.nagoya-u.ac.jp

There has been much interest recently in topological superconductors. In this lecture, I explain a basic idea of topological superconductors and their basic properties including their exotic excitations called Majorana fermions. In addition, I will present a recent idea of symmetry protected Majorana fermions and show that many unconventional superconductors can support the symmetry protected Majorana fermions.