Abstract Submitted
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Superconducting States in Doped Topological Materials MASATOSHI SATO, Department of Applied Physics, Nagoya Univrsity — There are considerable interests in topological superconductivity in condensed matter physics. In this talk, I will present our recent works on topological superconductors and the related phenomena. In particular, I will discuss how topological non-trivial structures in normal states may provide non-trivial quantum phenomena in the superconducting states. As examples, I will discuss odd parity superconductors, superconducting states in doped topological insulators and Weyl semi-metals. In the latter case, I will show how synergy effects of symmetry and surface states in the normal states give rise to novel topological quantum phenomena in the superconducting states.

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