Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Topological Blount's theorem of odd-parity superconductors SHINGO KOBAYSHI, Nagoya University, KEN SHIOZAKI, Kyoto University, MASATOSHI SATO, YUKIO TANAKA, Nagoya University — Nontrivial nodal structures are one of the most salient features of gap functions of the unconventional superconductors. In a system with spin-orbit coupling and crystal field, the group theory plays a key role to determine the node of the gap function [1]. From the group theoretical ground, Blount proved that the line node is "vanishingly improbable" in spin-triplet superconductors [2]. Namely, it is impossible to create a stable line node in odd-parity superconductors. Our motivation is to compare the group theoretical result with topological stability of nodes by K-theory [3] As a result, we found that K-theory not only rebuilds the original Blount's argument but also exhibits counterexamples with the stable line node. In this talk, we will show the physical interpretation of them. [1] M. Sigrist and K. Ueda, Rev. Mod. Phys. **63**, 239 (1991). [2] E. I. Blount, Phys. Rev. B, **32**, 2935 (1985). [3] P. Horava, Phys. Rev. Lett. **95**, 016405 (2005); Y. X. Zhao and Z. D. Wang, Phys. Rev. Lett. **110**, 240404 (2013).

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Date submitted: 13 Nov 2013 Electronic form version 1.4