

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Isotropic 3D f-wave topological Cooper pairing WANG YANG, Univ of California - San Diego, YI LI, Princeton University, CONGJUN WU, Univ of California - San Diego — We generalize the 3D isotropic p-wave spin triplet Cooper pairing state of the $^3\text{He-B}$ type into even high orbital partial-wave channels with large-spin fermions. In the spin-3/2 case, the f -orbital partial wave channel can support a spin-septet pairing yielding a fully gapped rotationally invariant pairing structure. Its topological properties are analyzed through the calculation of the gapless surface spectra.

Wang Yang
Univ of California - San Diego

Date submitted: 15 Nov 2013

Electronic form version 1.4