Abstract Submitted
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Magnetism in a Promising Topological Superconductor $Nb_{0.25}Bi_2Se_3$[1] SENG HUAT LEE, YUNSHENG QIU, Department of Physics, Missouri University of Science and Technology, ERIC WILLIAM BOHANNAN, Graduate Center for Materials Research, Missouri University of Science and Technology, YEW SAN HOR, Department of Physics, Missouri University of Science and Technology — $Nb_xBi_2Se_3$ was found to be a promising candidate of topological superconductor [1]. In addition to its superconductivity, $Nb_xBi_2Se_3$ also depicts paramagnetism. Not only do the magnetism and superconductivity coexist but they also mutually assist each other to give rise to a state which could be well described as a symbiosis of the two phases. The emergent of the symbiotic state can have exotic phenomenon[1,2]. We will report the magnetic and the transport properties for this promising topological superconductor in this presentation. [1] Y. Qiu *et. al.*, arXiv: 1512.03519. [2] F. Q. Noah, W.-Y. He, and K. T. Law, arXiv: 1608.05825.

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