Abstract Submitted
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Quantum Effects of Magnons Confined in Multilayered CoPd Ferromagnets[1] CHIDUBEM NWOKOYE, Naval Surface Warfare Center Carderock, ABID SIDDIQUE, LAWRENCE BENNETT, EDWARD DELLA TORRE, George Washington University, IMR TEAM — Quantum entanglement is a unique quantum mechanical effect that arises from the correlation between two or more quantum systems. The fundamental aspects of magnon entanglement has been theoretical studied [1] and the interest in developing technologies that exploits quantum entanglement is growing. We discuss the results of an experimental study of magnon entanglement in multilayered CoPd ferromagnets. Our findings are interesting and will aid in developing novel magnonic devices. [1] T. Morimae, A. Sugita, and A. Shimizu, Phys. Rev. A 71, 032317 (2005).

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