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Janet Talvacchia* (jtalvac1@swarthmore.edu), Department of Mathematics, Swarthmore College, 500 College Ave, Swarthmore, PA 19081. *Sasakian Structures in Generalized and Extended Generalized Geometry*. Preliminary report.

This talk will discuss notions of Sasakian structures for generalized and extended generalized geometry that have appeared in both the mathematics and physics literature. I'll present an approach to generalized Sasakian structures on a 5-dimensional manifold M^5 as a reduction from an $O(5,5)$ structure to an $SU(2) \times SU(2)$ structure with conditions on the generalized contact metric structure data on M^5 . I'll then look at how this approach matches up with definitions of Sasakian structures in dimension 5 in the extended generalized geometry setting put forward by physicists interested in quantum gravity. (Received September 03, 2017)