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Robert Short* (rshort@jcu.edu), Department of Mathematics & Computer Science, 1 John Carroll Boulevard, University Heights, OH 44118. *Relative Topological Complexity for Right-Angled Artin Groups*.

In a recent paper, I introduced the relative topological complexity of a pair of spaces (X, Y) where $Y \subset X$. Denoted $TC(X, Y)$, this counts the smallest size of motion planning algorithms that plan from X to Y .

Recently, topological robotics researchers have been studying the topological complexity of spaces imbued with group structures in different ways. One central example of spaces in this vein are the Eilenberg-MacLane spaces representing right-angled Artin groups. In this talk, I will introduce relative topological complexity and provide a means to compute the relative topological complexity of pairs of right-angled Artin groups. (Received September 04, 2019)