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**Daniel Yee\*** (yeedo@uwec.edu) and **Jason Gaddis**. *Examples of Congenial Algebras*.

If an algebra satisfies the congeniality property, then the algebra must satisfy the noncommutative version of Auslander's Theorem: an isomorphism between the skew group algebra and the endomorphism ring over the invariant subalgebra. Since Auslander's Theorem is a well known condition in noncommutative invariant theory, our goal was to identify algebras with congeniality. Thus, we study congeniality defined in the work of Bao, He, and Zhang (2016) and discovered several examples of algebras that satisfy this property. One of the examples we will explore is the quantized Weyl algebra. (Received August 28, 2020)