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**Christopher O'Neill\*** (coneill@math.tamu.edu), **Vadim Ponomarenko**, **Reuben Tate** and **Gautam Webb**. *Catenary degrees of elements in numerical monoids.*

Nonunique factorization in commutative monoids is often studied through the use of factorization invariants. One such invariant, called the catenary degree, measures the distance between factorizations within a given monoid, and can be computed using a graph theoretic construction. In this talk, we present results from an undergraduate research project involving the catenary degree in additive submonoids of the natural numbers. (Received January 14, 2015)