1172-13-218   **Christine Berkesch** and **C-Y. Jean Chan***, chan1cj@cmich.edu, and **Patricia Klein**, **Laura Felicia Matusevich**, **Janet Page** and **Janet Vassilev**. *Differential operators on affine semigroup rings modulo monomial ideals.*

Traves (1999) and Saito-Traves (2001 & 2004) present explicitly the differential operators on rings of combinatorics nature such as Stanley-Reisner rings and affine semigroup algebras over an algebraically closed field of characteristic zero. In this talk we consider the differential operators of the quotient of an affine semigroup ring modulo a radical monomial ideal. Utilizing the combinatorial structure of affine semigroup rings, we discuss the computation of the differential operators of their quotient rings and describe the algebraic structure of the ring of differential operators. This is a joint work with Christine Berkesch, Patricia Klein, Laura F. Matusevich, Janet Page and Janet Vassilev. (Received August 29, 2021)