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**TESSA REIMER**, University of Manitoba  
*Properties of Symbolic Powers of Ideals*

Symbolic powers of ideals in the polynomial ring have appeared in many significant problems in commutative algebra, algebraic geometry, and other branches of mathematics. However, their properties have proven challenging to study, even for square-free monomial ideals. In this talk, we will discuss a splitting for symbolic powers of edge ideals of graphs. This splitting can be used to explore the graded Betti numbers of the symbolic power which in turn provides insight into relationships between generators and syzygies. We will close with a discussion of bounds for Betti numbers of parallelizations of graphs