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Yue Cai* (ycai@math.tamu.edu), Department of Mathematics, MS 3368, Texas A&M University, College Station, TX 77843, and **Margaret Readdy** (margaret.readdy@uky.edu). *A poset approach to the q -Stirling numbers.*

In this talk, we show the classical q -Stirling numbers of the second kind can be expressed more compactly as a pair of statistics on a subset of restricted growth words. The resulting expressions are polynomials in q and $1 + q$. We extend this enumerative result via a decomposition of the Stirling poset of the second kind. This poset supports an algebraic complex and a basis for integer homology is determined. Time permitting, a parallel enumerative, poset theoretic and homological study for the q - Stirling numbers of the first kind will also be discussed. (Received August 25, 2016)