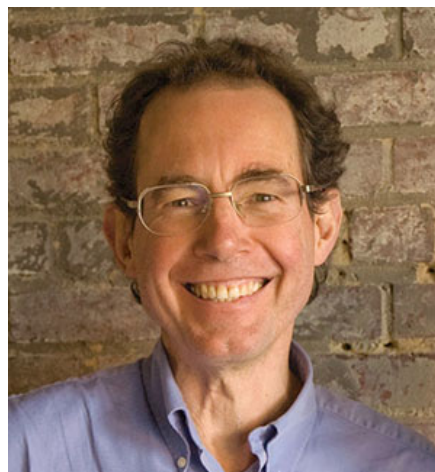


## ***DISCRETE MATHEMATICS SEMINAR***

**Speaker: Bruce Sagan**  
**Michigan State University**



**Date:** Thursday, April 27, 2023

**Time:** 2:30 PM

**Location:** 125 Hayes-Healy Hall

***Lecture Title:***

**Stirling numbers for complex reflection groups**

***Abstract***

The ordinary Stirling numbers count set partitions and permutations of  $\{1, 2, \dots, n\}$  by number of subsets and number of cycles, respectively. We show how to generalize these concepts to a complex reflection group. The ordinary Stirling numbers are recovered in type  $A$ . It turns out that often these Stirling numbers can be expressed in terms of elementary and homogeneous symmetric functions. We also make a connection with super coinvariant algebras. All terminology concerning Stirling numbers, symmetric functions, and complex reflection groups will be defined. This is joint work with Joshua Swanson.