

1106-VR-2191      **Katherine P. Walsh\*** (k3walsh@math.arizona.edu). *Patterns in a Non-Symmetric Polynomial related to the Colored Jones Polynomial of Amphichiral Knots*. Preliminary report.

Much work has been done looking at the patterns in the coefficients of the colored Jones polynomials which are a sequence of Laurent polynomials assigned to each knot. Since the colored Jones polynomial of an amphichiral knot is symmetric in  $q$  and  $1/q$ , we can define a new polynomial  $M_{N,K}(x)$  so that  $M_{N,K}(q + 1/q)$  is the  $N$  colored Jones polynomial of the knot  $K$ . In this talk, we look at the patterns in the coefficients of this new polynomial, which are much more striking than the patterns in the coefficients of the colored Jones polynomial. We will investigate which of these patterns are potentially related to geometric properties of the knot and which are consequences of the Chebyshev polynomials used to find  $M_{N,K}(x)$  from the corresponding colored Jones polynomial. (Received September 16, 2014)