

1096-54-1241

Orsola A Capovilla-Seale* (ocapovilla@brynmawr.edu) and **Sicong C Zhang**. *The crossing spectrum of knots and the additivity of multi-crossing numbers under composition.*

Traditionally, knots have been tabulated according to their crossing number, which is the least number of crossings in any projection of the knot. Recently, these traditional crossings have been extended to n-crossings, where n strands of the knot intersect in the projection. Hence by minimizing the number of n-crossings, we can define a sequence of crossing numbers for every knot that we call the crossing spectrum. We will discuss the computation of these numbers for various knots. Furthermore we investigate how the n-crossing number behaves under composition. (Received September 13, 2013)