Huan T Vo*, University of Toronto, Canada. On the $\mathfrak{sl}_2$ Weight System and Intersection Graphs.

Given a chord diagram $D$, the value of the $\mathfrak{sl}_2$ weight system on the primitive part of $D$ is a polynomial in $c$, the Casimir element of $\mathfrak{sl}_2$. It turns out that the coefficient of the highest power of $c$ can be computed in terms of the intersection graph of $D$. This formula was first conjectured in a paper by Lando et al. In this talk, I will sketch a proof of this fact, which is a simple consequence of the Melvin-Morton-Rozansky conjecture. (Received August 05, 2015)