1039-57-58 David Futer* (dfuter@math.msu.edu) and Effie Kalfagianni (kalfagia@math.msu.edu). The volume and Jones polynomial of hyperbolic links.

Experimental evidence suggests that the volume of a hyperbolic knot or link is coarsely determined by the coefficients near the head and tail of its Jones polynomial. I will discuss some recent work that proves this is indeed the case for a large family of links. The proof relies on a newly discovered explicit connection between the coefficients of the Jones polynomial and the *guts* of certain surfaces constructed from a Kauffman state. (Received March 03, 2008)