## 1014-51-611 Christopher J Leininger\* (clein@math.uiuc.edu), Department of Mathematics, University of Illinois at Urbana Champaign, 273 Altegeld Hall, 1409 W. Green St., Urbana, IL 61801. Dilatations of pseudo-Anosov automorphisms.

I'll discuss previous work on dilatations of pseudo-Anosov automorphisms in subgroups of the mapping class group generated by two positive multi-twists and the appearance of Lehmer's number. In addition, I'll talk about the problem of determining minimal dilatations for other special subgroups and a recent solution (joint work with B. Farb and D. Margalit) for the case of the Torelli subgroup. (Received September 21, 2005)