

University of Oklahoma Geometric Group Theory Seminar

Tuesdays 4:00pm in PHSC 1105

Date: Tuesday, September 13, 2005

Speaker: Noel Brady

Institution: University of Oklahoma

Title: *Isoperimetric exponents of subgroups of CAT(0) groups - I*

Abstract: We start with a brief survey of CAT(0) spaces and CAT(0) groups.

Next, we look at a family of groups $\{G_n\}_{n=1}^{\infty}$ with the following properties; the Dehn function of G_n is x^{n+2} , and G_n is a subgroup of a right-angled Artin group A_n . The A_n are CAT(0) cubical groups.

Finally, we look at a technique of Bieri (the doubling trick) which can be used to produce a second family of groups $\{G_n\}$ with Dehn function x^{n+2} and G_n embedding in a CAT(0) cubical group. We end with some open problems.