

1067-00-1330

**Quan T Tran\*** (qtran@ou.edu), 3831 NW 10, Oklahoma City, OK 73107. *Snowflake Groups with Super-Exponential 2-Dimensional Dehn Functions.*

In their paper *Super-Exponential 2-Dimensional Dehn Functions*, J. Barnard, N. Brady and P. Dani produced groups of type  $\mathcal{F}_3$  with 2-dimensional Dehn functions  $\delta^2(x) = \exp^m(x)$ , where  $m$  is a natural number. And N. Brady, M. Bridson, M. Forester and K. Shankar produced in their paper *Snowflake Groups, Perron-Frobenius Eigenvalues, and Isoperimetric Spectra* groups of type  $\mathcal{F}_{n+1}$  whose  $n$ -dimensional Dehn functions are  $\delta^n(x) = x^s$  for any  $s \in \mathbb{Q} \cap [2, \infty)$ . We will combine these two ideas to produce groups of type  $\mathcal{F}_3$  whose 2-dimensional Dehn functions are  $\delta^2(x) = \exp^m(x^s)$ . (Received September 20, 2010)