## "Group Theory International" Online Seminar

## **Murray Elder**

(University of Newcastle, Australia)

"Some results about growth and cogrowth for finitely generated groups"

Thursday, Mar 14, noon (New York Time)

## **Abstract:**

I will discuss recent experimental work comparing the cogrowth rates of various 2-generated groups, including Thompson's group F, Baumslag-Solitar groups and a the basilica group, using some powerful sampling methods from statistical mechanics. The cogrowth rate is directly related to amenability, and I will speculate on what our results might say about the amenability of the examples tested. I will also mention some work on lower bounds for growth rates of Baumslag-Solitar groups.

This is joint work with various colleagues, including Andrew Rechnitzer, E.J. Janse van Rensburg, Tom Wong, and Josep Burillo.

Next presentation: Mar 28, Igor Lysenok (Steklov Institute of Mathematics, Moscow, Russia)

