Michigan Math Club

Thursday at 4pm in the Commons
Free Pizza and Pop

Quantifying Residual Finiteness

Khalid Bou-Rabee

Abstract for 3 February 2011

Pretend you're in a world where you only see infinite groups through finite ones (i.e. through their finite quotients). How well would you view elements in a given infinite group? In this talk, we aim to answer this question in a quantitative way. This gives us statistics that we can analyze that, it turns out, hold a wealth of algebraic information. Famous tools such as the prime number theorem and Bertrand's postulate will be major players.