Department of Mathematics and Statistics Colloquium

Combinatorics and the Kitchen Sink

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Abstract: Numerical semigroups are simple combinatorial objects that lead to deep and subtle questions. We answer in one fell swoop virtually all asymptotic questions about factorization lengths in numerical semigroups. Surprisingly, this uses tools from complex, harmonic, and functional analysis, probability theory, algebraic combinatorics, and computer-aided design! Our results yield uncannily accurate predictions that agree with numerical computations, along with some totally unexpected byproducts.

Monday, September 21 at 3:10 pm via Zoom