

# Extremal Combinatorics

**Organizer(s):**

Penny Haxell (University of Waterloo)

**Description:**

In extremal combinatorics, one seeks to find the extreme value of some combinatorial parameter, over all combinatorial objects in a certain class. Since its introduction by Turán in the 1940's, it has grown into an immensely broad field and has produced many fundamental results and conjectures. Several of the main topics of extremal combinatorics will be addressed in this minisymposium, including Ramsey and anti-Ramsey problems, forbidden subgraph problems, and stability of extremal structures.

**Titles and Speakers:**

- *Regularity, stability, and Ramsey numbers*  
Jozef Skokan (London School of Economics and University of Illinois at Urbana-Champaign)
- *Quadruple systems with independent neighborhoods*  
Dhruv Mubayi (University of Illinois at Chicago)
- *Independent Dominating Sets and Hamiltonian Cycles*  
Jacques Verstraëte (McGill University)
- *Extremal quadrilateral-free graphs*  
Zoltan Füredi (University of Illinois at Urbana-Champaign and Renyi Institute)
- *On some Ramsey properties of the  $n$ -cube*  
Jozsef Solymosi (University of British Columbia)