

# Graph Homomorphisms

**Organizer(s):**

Richard Brewster (Thompson Rivers University)

**Description:**

Homomorphisms are natural objects in many branches of mathematics and graph theory is no exception. However until recently, many graph theorists would not have considered homomorphisms a core topic within the discipline. This is changing with increased activity in the study of graph homomorphisms, together with increased applications to problems from computational complexity to theoretical physics. (See Hell and Nešetřil **Graphs and Homomorphisms**, Oxford Press 2004.)

The goal of the minisymposium is to present: an introduction to the discipline, for those less familiar with the topic; two deeper talks in the discipline; and two talks on applications of graph homomorphisms.

**Titles and Speakers:**

- *Graph Homomorphisms, an introduction*  
Richard Brewster, Thompson Rivers University
- *Homomorphisms and the web graph*  
Anthony Bonato, Wilfred Laurier University
- *Core-indicator graphs*  
Karen Collins, Welsleyan University
- *Covering arrays, graph products and homomorphisms*  
Brett Stevens, Carleton University
- *Right adjoints and Hedetniemi's conjecture*  
Claude Tardif, Royal Military College