

# Tom Kelly

University of Waterloo  
Department of Combinatorics & Optimization  
200 University Avenue West,  
Waterloo, ON, N2L 3G1, Canada.

e-mail: [t9kelly@uwaterloo.ca](mailto:t9kelly@uwaterloo.ca)  
website: [math.uwaterloo.ca/~t9kelly](http://math.uwaterloo.ca/~t9kelly)

## Education:

2015 – **Ph.D. Candidate in Combinatorics & Optimization**  
University of Waterloo, Waterloo, ON.  
Supervisor: Luke Postle

2011 - 2015 **A.B. Mathematics**  
Princeton University, Princeton, NJ, 2015, *Cum Laude*.

## Awards:

2015 **Middleton Miller '29 Prize**  
Awarded for best independent work in mathematics (\$1500 value),  
Princeton University, 2015.

## Publications:

- T. Kelly, C-H Liu. Minimum Size of Feedback Vertex Sets of Planar Graphs of Girth at least Five, *European Journal of Combinatorics*, 61C:138–150, 2017.
- S. Connolly, Z. Gabor, A. Godbole, B. Kay, T. Kelly. Bounds on the Maximum Number of Minimum Dominating Sets, *Discrete Mathematics*, 339(5):1537–1542, 2016.

## Submitted Articles:

- T. Kelly, L. Postle. Exponentially Many 4-List-Colorings of Triangle-Free Graphs on Surfaces, *Journal of Graph Theory*, accepted. [arXiv:1602.04717](https://arxiv.org/abs/1602.04717).
- T. Kelly, C-H Liu. Size of the Largest Induced Forest in Subcubic Graphs of Girth at least Four and Five, *Journal of Graph Theory*, submitted. [arXiv:1603.03855](https://arxiv.org/abs/1603.03855).

## Conference Presentations:

June 2017 “*Beyond Degree-Choosability Toward a Local Epsilon Version of Reed’s  $\omega, \Delta, \chi$  conjecture*” CanaDAM ’17, Toronto, ON.  
June 2016 “*Large Induced Forests in Planar and Subcubic Graphs of Girth 4 and 5*”, SIAM DM ’16, Atlanta, GA.

## Seminar Presentations:

Apr 2017 Charles University (Prague, Czech Republic), Combinatorics Seminar.  
Nov 2015 University of Waterloo, Graph Theory Seminar.

## Conferences Attended:

- June 2017 Canadian Discrete and Algorithmic Mathematics Conference (CanaDAM), Toronto, ON.  
Oct 2016 New Trends in Graph Coloring, Banff, AB.  
July 2016 Younger @ 80 Directed Graphs Conference, Waterloo, ON.  
June 2016 SIAM Conference on Discrete Mathematics, Atlanta, GA.

## Teaching

### **Teaching Assistant at University of Waterloo**

- Spring 2017 CO 342 - Introduction to Graph Theory.  
Winter 2017 Math 137 - Calculus 1 for Honours Mathematics.  
Fall 2016 CO 342 - Introduction to Graph Theory.  
Spring 2016 CO 342 - Introduction to Graph Theory.  
Winter 2016 Math 127 - Calculus 1 for the Sciences.  
Fall 2015 Math 117 - Calculus 1 for Engineering.