# Frederick Robinson

### Education

- 2017 Doctorate in Mathematics (Expected), University of California Los Angeles.
- 2012 Bachelor in Mathematics with Honors, Northwestern University, 3.62 (Major GPA).

  Robert R. Welland Prize for Outstanding Achievement in Mathematics by a Graduating Senior

  Honors thesis on Persistant Homology under David Nadler
- 2008 High School Diploma.

## Research Programs

- 2010 **Discrete and Continuous Geometry**, Selected for and attended two week research conference at Northwestern University.
- 2010 **Number Theory Research**, Funded to conduct research on cyclotomic integers under Prof. F. Calegari.
- 2011 **Indiana University Research Program**, NSF funded project investigating phylogenetics with Prof. E Housworth.

#### Jobs

- 2012-2013 **Teaching Assistant**, Conducted recitations for undergraduate classes.
  - 2010 **Physics Programming**, Coded in C leveraging GNU Scientific Library to simulate gravitational waves from intermediate mass ratio inspiral.

#### Computer skills

Proficient Go, Mathematica, Python

Basic Java, C

Miscellaneous Windows, Microsoft Office, Linux, LATEX

Relevant Upper-division undergraduate course on algorithms. Greedy optimization, divide and Course conquer, dynamic programming, network flows, reductions, and randomized algorithms. Computational tractability (NP-completeness).

#### Languages

English Fluent

Spanish Proficient

#### Publications

Frederick Robinson and Michael Wurtz. On the magnitudes of some small cyclotomic integers. *Acta Arithmetica*, 160(4):317–32, 2013.