

Nima Amini

Curriculum Vitae

Education

- Aug 2014– **Ph.D. Mathematics**, Royal Institute of Technology (KTH) (expected early 2019).
Thesis: Combinatorial polynomials
- 2013–2014 **MASt Pure Mathematics**, University of Cambridge, Pass with Merit.
Essay: Infinite-dimensional Lie algebras
- 2009–2010 **MA Mathematics and Computer Science**, University of Oxford, First Class.
- 2006–2009 **BA Mathematics and Computer Science**, University of Oxford, First Class.

Teaching

- Aug 2014– **Teaching Assistant**, KTH, Stockholm.
- 20% of the doctoral employment is allotted to teaching duty for the civil engineering programs at KTH.
 - Responsibilities include holding exercise sessions for up to 40 students at a time, leading seminars, assisting computer labs, answering student questions and grading exams.
 - Courses taught: Basic Course in Mathematics, Single Variable Calculus, Multivariable Calculus, Linear Algebra, Differential Equations and Discrete Mathematics.
- 2015–2016 **Supervision**, KTH, Stockholm.
- Volunteered to supervise two groups of talented high-school students for their final year projects, entitled 'Pólya enumeration theory' and 'Mathematics of Texas Hold'em Poker'.

Publications

- Non-representable hyperbolic matroids**, (joint with Petter Brändén).
Advances in Mathematics 43 (2018) 417–449
- Spectrahedrality of hyperbolicity cones of multivar. matching polynomials**.
Journal of Algebraic Combinatorics (in press) DOI: 10.1007/s10801-018-0848-9
- Equidistributions of Mahonian statistics over pattern avoiding permutations**.
Electronic Journal of Combinatorics 25 (1) (2018) P7

Commissions of Trust

- Reviewer for mathematical research journals**.
European Journal of Combinatorics, Journal of Combinatorial Theory Series A, Electronic Journal of Combinatorics.
- Co-organizer of the KTH Combinatorics Seminar**.
- Member of the colloquium committee of Stockholm Mathematics Centre**.