

Eugenia Rosu

Curriculum Vitae

Personal information

Email: rosu@math.berkeley.edu
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Education

2011–present **PhD student, University of California Berkeley.**
Qualifying exam passed on May 8th, 2013
Research interests: **Automorphic representations, special values of L -functions, rational points on elliptic curves.**
Advisor: Xinyi Yuan, xyx@math.berkeley.edu
2008–2011 **Bachelor of Science in Mathematics, Jacobs University Bremen.**

Research

PhD thesis **Integers that can be written as the sum of two rational cubes, in preparation.**
<https://math.berkeley.edu/~rosu/main.pdf>
<https://arxiv.org/abs/1111.6800> **Non-Beiter ternary cyclotomic polynomials with an optimally large set of coefficients, joint with P. Moree, Int. J. Number Theory, No. 8, 2012.**
Paper: **An improved reduction algorithm for binary forms.**
Supervisor: Prof. Dr. Michael Stoll, Michael.Stoll@uni-bayreuth.de
Bachelor Thesis: **U -elements in matrix groups.**

Invited talks

November 28-30, 2016 **Number Theory and Algebra Seminar at University of Arizona.**
University of Arizona, Tucson, AZ
November 18-19, 2016 **Rutgers-Newark Junior Number Theory Days.**
Rutgers University-Newark, Newark, NJ
July 11-22, 2016 **Workshop on Automorphic Forms and Related Topics.**
University of Sarajevo, Sarajevo, Bosnia and Herzegovina
June 12-18, 2016 **2nd Nisyros conference on automorphic representations and related topics.**
Nisyros Island, Greece
March 7-10, 2016 **30th Automorphic forms workshop.**
Wake Forest University, Wake Forest, NC, USA

Conference participation

- August 11-15, 2015 **Arithmetic 2015: Silvermania.**
Brown University, Providence, RI, USA,
- July 12-19, 2015 **1st Nisyros Conference on automorphic representations and related topics.**
Nisyros Island, Greece
- March 14-18, 2015 **Arizona Winter School 2015: Arithmetic and Higher-Dimensional Varieties.**
University of Arizona at Tucson, AZ, USA
- June 30th - July 5th, 2014 **Building Bridges: 2nd EU/US Summer School on Automorphic Forms and Related Topics.**
University of Bristol, Bristol, UK
- June 18-27, 2014 **The Gan-Gross-Prasad Conjectures.**
Jussieu Insitute, Paris, France
- March 15-19, 2014 **Arizona Winter School 2014: Arithmetic Statistics.**
University of Arizona at Tucson, AZ, USA
- May 23-26, 2013 **Workshop in the Cohomology of Arithmetic Groups.**
DePaul University, Chicago, USA
- March 9-13, 2013 **Arizona Winter School: Modular forms and modular curves.**
University of Arizona at Tucson, AZ, USA
- May 12-13 2012 **Workshop Towards a Local Proof of the Local Langlands Correspondence.**
University of Chicago and University of Illinois at Chicago, Chicago, USA
- June 1st - June 23rd, 2012 **The Resolution of Singular Algebraic Varieties.**
Clay Mathematics Institute, Obergurgl, Austria
- June 25th - July 5th 2012 **Around the Zilber-Pink Conjectures .**
Jussieu Insitute, Paris, France

Selected talks and presentations

- August 2015 **Poster presentation: Integers written as the sum of two rational cubes.**
Brown University, Providence, RI, USA
- Spring 2015 **The BSD conjecture on function fields.**
UC Berkeley, Number Theory Seminar
- Spring 2015 **L -functions of elliptic curves.**
UC Berkeley, Number Theory Student Seminar
- Fall 2014 **The Langlands program.**
UC Berkeley, Number Theory Student Seminar
- Spring 2014 **Shimura varieties.**
UC Berkeley, Number Theory Student Seminar
- Spring 2013 **The Shafarevich conjecture.**
UC Berkeley, Number Theory Student Seminar
- Fall 2013 **An introduction to automorphic representations.**
UC Berkeley, Number Theory Student Seminar
- Spring 2012 **A review of Elliptic Curves.**
UC Berkeley, Number Theory Student Seminar
- Spring 2012 **An introduction to Modular curves.**
UC Berkeley, Number Theory Student Seminar
- Fall 2012 **An introduction to the Riemann Hypothesis.**
UC Berkeley, Teach out Against Police Brutality

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- Spring 2011 **An introduction to Homological Algebra (4 parts).**
Jacobs University, Lie algebras and representation theory seminar
- Spring 2009 **About the Gamma and the Riemann-Zeta Functions.**
Jacobs University, Perspectives of Mathematics course

Remarkable Achievements

- 2014, 2016 **Lehmer Fellowship in number theory.**
Offered by UC Berkeley for the Spring semester
- 2015 **Featured in the UC Berkeley Newsletter.**
<https://math.berkeley.edu/sites/default/files/pages/Newsletter2015.pdf>
- 2010 **Interview in the annual newsletter of European Women in Mathematics.**
<http://www.europeanwomeninmaths.org/sites/default/files/newsletters/news10.pdf>
- 2008-2010 **Member of the President's List of the Academic Year.**
Honor offered for academic achievement based on GPA
- 2008-2011 **Merit-based Scholarship for studies at Jacobs University.**
- 2008 **Gold medal, Balkan Mathematical Olympiad.**
Highest score in the competition
- 2007 **Gold medal, International Archimedes Contest in Mathematics.**
- 2003-2005 **1st Prize, National Olympiad of Romania in Mathematics.**
- 2007 **2nd Prize, National Olympiad of Romania in Mathematics.**
- 2008 **3rd Prize, National Olympiad of Romania in Mathematics.**

Teaching experience

- 2012-2014 Instructor for the Berkeley Math Circle
- 2013, 2016 Graduate student instructor for Math 32 (Precalculus)
- 2014 - 2015 Graduate student instructor for Math 55 (Discrete Math)
- 2011 - 2013 Graduate student instructor for Math 1A/1B (Calculus)
- 2010 - 2011 Teaching assistant for the course Foundation Mathematics
- 2008 Lecturer and trainer of the Mathematics Team of the "Costache Negruzzi" High School

Other Professional Experiences

- 2013-2015 Co-organizer of the Student Number Theory Seminar at UC Berkeley
- 2008 Editor's advisor for the International Mathematical Olympiad Compendium

Languages

- English **Proficient**
- Romanian **Native speaker**
- German **Basic**