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Charles Siegel

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Personal information

Date of birth April 25, 1985
Place of birth San Francisco, CA
Nationality United States

Education

2007–now **Ph.D. in Mathematics**, *University of Pennsylvania*, Philadelphia, PA.
Anticipated date of graduation: May 2012
advisor Prof. Ron Donagi
2003–2007 **B.S. in Mathematics**, *Rutgers University*, New Brunswick, NJ.
Graduated with highest honors

Honors and awards

2009 **National Science Foundation Graduate Research Fellowship**.
Awarded Honorable Mention
2007–2011 **Benjamin Franklin Fellowship**, *University of Pennsylvania*.
Full tuition, health insurance and a yearly stipend of \$21,000
2005–2007 **Weill Scholarship**, *Rutgers University*.
Scholarship on the basis of academic performance
2005 **Lawrence Corwin Scholarship**, *Rutgers University*.
Awarded for performance on a special examination.

Experience

Teaching

Summer 2010 **Math 170 (Ideas in Mathematics)**, *University of Pennsylvania*.
Lecturer in charge of course
Spring 2010 **Math 370 (Abstract Algebra I)**, *University of Pennsylvania*.
Teaching Assistant in charge of recitations
Fall 2009 **Math 116 (Honors Calculus II)**, *University of Pennsylvania*.
Teaching Assistant in charge of recitations and administration of weekly quizzes
Summer 2009 **Math 104 (Calculus I)**, *University of Pennsylvania*.
Lecturer in charge of course

- Spring 2009 **Math 240 (Calculus III)**, *University of Pennsylvania*.
Teaching Assistant in charge of recitations and administration of weekly quizzes
- Fall 2008 **Math 371 (Abstract Algebra II)**, *University of Pennsylvania*.
Teaching Assistant in charge of recitations.
- Fall 2007 **Math 115 (Precalculus)**, *Rutgers University*.
Recitation Mentor in charge of recitations and administration of weekly quizzes
- Spring 2006 **Math 152 (Calculus II for Math and Physical Sciences)**, *Rutgers University*.
Teaching Assistant in charge of recitations and administration of weekly quizzes
- Fall 2005 **Math 151 (Calculus I for Math and Physical Sciences)**, *Rutgers University*.
Peer Mentor providing assistance to the Teaching Assistant during recitation and with grading
- Spring 2005–Spring 2007 **Rutgers Learning Center**, *Rutgers University*.
Tutoring mathematics courses at all levels, particularly Calculus and Abstract Algebra

Research

- Jun 2007–Aug 2007 **Undergraduate Researcher**, *Rutgers University*, New Brunswick, NJ.
Project: Equivariant Cohomology of the Lagrangian Grassmannian
Under the direction of Prof. Anders Buch
- Jun 2006–Aug 2006 **Undergraduate Researcher**, *Mt. Holyoke College*, South Hadley, MA.
Project: Polynomial Representations of Knots
Under the direction of Prof. Alan Durfee and Prof. Donal O'Shea
- Jun 2005–Aug 2005 **Undergraduate Researcher**, *Rutgers University*, New Brunswick, NJ.
Project: Improved Error Bounds for Dirichlet-to-Neumann Absorbing Boundaries
Under the direction of Prof. Avraham Soffer

Service

- Sep 2009–Apr 2011 **Organizer**, *University of Pennsylvania*, Philadelphia, PA.
Organizer for Graduate Student Pizza Seminar
- Sep 2009–Apr 2010 **Organizer**, *University of Pennsylvania*, Philadelphia, PA.
Organizer for Undergraduate Math Seminar and Reading Program
- Jan 2008 **Organizer**, *University of Pennsylvania*, Philadelphia, PA.
Founded the Graduate Student Algebra Seminar
- Jan 2006 **Organizer**, *Rutgers University*, New Brunswick, NJ.
Organized an undergraduate String Theory course

Publications and Preprints

- Charles Siegel, Avy Soffer, Chris Stucchio,
Improved Error Bounds for Dirichlet-to-Neumann Absorbing Boundaries,
[arXiv:math/0811.0765].

Conference participation

- Jun 2010 **ICTP Summer School on Hodge Theory**, *ICTP*, Trieste, IT.
- Jun 2009 **RTG Graduate Summer School “Geometry of Quantum Fields and Strings”**,
University of Pennsylvania, Philadelphia, PA.
- Jun 2008 **Conference on vector bundles in honour of S. Ramanan**, Miraflores de la Sierra
(Madrid, Spain).

- Mar 2008 **Workshop on Algebro-Geometric Derived Categories and Applications**, *Institute for Advanced Study*, Princeton, NJ.
- Nov 2007 **Gauge Theory and Representation Theory**, *Institute for Advanced Study*, Princeton, NJ.
- Aug 2007 **Young Mathematicians Conference 2007**, *Ohio State University*, Columbus, OH.
- July 2007 **Deformation Theory and Moduli in Algebraic Geometry**, *MSRI*, Berkeley, CA.
- Aug 2006 **Young Mathematicians Conference 2006**, *Ohio State University*, Columbus, OH.

Presentations

- Summer 2010 The Schottky Problem
ICTP Summer School in Hodge Theory
- Spring 2010 Toric Residues
GLSM Seminar, University of Pennsylvania
- Spring 2010 Kontsevich's Formula and Related Results
Graduate Student Algebra Seminar, University of Pennsylvania
- Spring 2010 What is Quantum Cohomology?
Graduate Student Algebra Seminar, University of Pennsylvania
- Spring 2010 Solving the Cubic with Invariant Theory
Graduate Student Pizza Seminar, University of Pennsylvania
- Spring 2009 Mollen's Theorem
Graduate Student Algebra Seminar, University of Pennsylvania
- Spring 2008 Quotients of Schemes by Finite Groups
Graduate Student Algebra Seminar, University of Pennsylvania
- Spring 2008 Polynomial Knots
Graduate Student Pizza Seminar, University of Pennsylvania
- Spring 2007 Uniformization of Surfaces via Ricci Flow
Graduate Student Geometry/Topology Seminar, Rutgers University
- Fall 2006 Polynomial Knots
Graduate Student Pizza Seminar, Rutgers University
- Fall 2006 Teichmüller Spaces I & II
Graduate Student Geometry/Topology Seminar, Rutgers University
- Aug 2006 On the Perturbation of Polynomial Knots
Young Mathematicians Conference 2006, with Emily List

Languages

- English Native Speaker
- French Reading knowledge

Updated

January 28, 2010