Curriculum Vitæ

Tommaso Giorgio Centeleghe

Universität Heidelberg
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Personal Data

Date and Place of Birth: July 2nd, 1980. Bologna, Italy.

Education

2009, May. PhD in Mathematics – University of Utah, Salt Lake City, UT
   Dissertation: "A conjectural mass formula for mod p Galois representations"
   Advisor: Professor Chandrashekhar Khare

2005, May. MA in Mathematics – University of Utah, Salt Lake City, UT

2003, July. LAUREA in Mathematics – Università degli Studi di Bologna, Bologna, Italy
   Dissertation: "Level structures on families of elliptic curves"
   Advisor: Professor Luca Migliorini

Research Positions

2009, September – . Post doc at Universität Duisburg–Essen/Universität Heidelberg.
   Head of the research group: prof. Gebhard Böckle.

Honors

2005, June. Summer research award – University of Utah

2003, July. Graduate Fellowship for studies abroad – Università degli Studi di Bologna

Works

• *A conjectural mass formula for mod p Galois representations.*
Thesis, University of Utah, May 2009.

• *Computing the number of certain Galois representations mod p.*
Journal de Théorie des Nombres de Bordeaux **23** (2011), 603–627.

• *On certain cusp forms on a definite quaternion.*
Submitted for publication, preprint available at `http://arxiv.org/abs/1108.1292`.

• *On the splitting of primes in $K(E[n])$.*
Submitted for publication, preprint available at `http://arxiv.org/abs/1201.2124`.

• *Odd ichosahedral extensions of* **Q** *ramified at one prime only.*
In preparation, joint with J. Kiming.

• *On a result of Iwasawa on class numbers of number fields.*
Preprint.

• *On supersingular elliptic curves over the prime field.*
Preprint.

- *Tame, mod p Galois representations of $\mathbf{Q}$, for $p < 41$*

Preprint.

Papers available at
http://www1.iwr.uni-heidelberg.de/groups/arith-geom/centeleghe/

Relevant Talks and Seminars

Spring 2012. Séminaire de Théorie des nombres, Université Clermont Ferrand
A conjectural mass formula for mod p Galois representations.

Winter 2011-2012. Séminaire de Théorie des nombres, Université Paris 6
On torsion fields arising from elliptic curves.

Fall 2011. Number Theory Seminar, Humboldt–Universität zu Berlin
On certain cusp forms on a definite quaternion.

Summer 2011. Computations with modular forms 2011, Universit at Heidelberg
Computing the number of certain Galois representations mod p.

Spring 2011. Number Theory Seminar, University of California at Los Angeles
Cusp forms on a definite quaternion and mod p Galois representations.

Spring 2011. Seminario di Algebra e Geometria, Università di Bologna
Su certe forme automorfe sull'algebra di quaternioni di discriminante primo.

Summer 2010 Modular Conference, CRM, Universitat Autònoma de Barcelona
Computing the number of certain Galois representations mod p.

Spring 2010 Number Theory Seminar, Université Paris 13 Nord
A conjectural mass formula for mod p Galois representations.

Fall 2009 Number Theory Seminar, Universit at Duisburg-Essen
Katz's geometric definition of modular form

Spring 2009 Universitá La Sapienza, Roma
A conjectural mass formula for mod p Galois representations

Spring 2008 Undergraduate Colloquium, University of Utah
How to make Σp^i converge: introduction to p-adic numbers

Spring 2007, GSAC Colloquium, University of Utah
Primes of the form $x^2 + ny^2$ (after D.Cox)

Spring 2006, MATH 7835 - Topics in Number Theory, University of Utah
Hilbert Class Ring of an imaginary quadratic order

Fall 2005, MATH 7835 - Topics in Number Theory, University of Utah
Bely's theorem and parametrizations of elliptic curves

Teaching

University of Utah

Fall 2003: Math 1210, Calculus I (Teaching Assistant)

Spring 2004: Math 2250, ODE's and Linear Algebra (Teaching Assistant)

Fall 2004: Math 1060, Trigonometry

Spring 2005: Math 1090, Business Algebra

Fall 2005: Math 1210, Calculus I

Spring 2006: Math 2250, ODE's and Linear Algebra (Teaching Assistant)

Fall 2006: Math 1050, College Algebra

Summer 2007: Math 1030, Quantitative reasoning

Spring 2008: Math 1090, Business Algebra

Summer 2008: Math 3150, Partial Differential Equations

Fall 2008: Math 1090, Business Algebra

Spring 2009: Math 3150, Partial Differential Equations

Universität Duisburg–Essen

Fall 2010: Algebraic number theory (Teaching Assistant of prof. Gabor Wiese)

School/Conferences Attended

Summer 2012, Universit at Heidelberg
Iwasawa 2012

Spring 2012, University of California at Los Angeles
p-adic Modular Forms and Arithmetic

Summer 2011, Universit at Heidelberg
Computations with Modular Forms 2011

Summer 2010, CRM, Universitat Autònoma de Barcelona
Modular Conference: Arithmetic of Modular Forms and Modularity results

Fall 2009, Warwick Mathematics Institute
Galois Theory and Explicit Methods, 3rd annual meeting

Spring 2008, University of California at Los Angeles, CA
Selmer Groups, L-functions, and Galois Deformations

Summer 2007, Centre International de Rencontres Mathematiques, Lumini, France
Ecole d'été sur la conjecture de modularité de Serre

Summer 2005, Univesitité Luis Pasteur, Strasbourg, France.
Représentations galoisienne