

# Curriculum Vitae: Tommaso Giorgio Centeleghe

Interdisciplinary Center for Scientific Computing  
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Born: July 2nd 1980, Bologna (Italy)

Marital status: single

## Research interests:

- algebraic number theory, automorphic forms, Galois representations
- Abelian varieties over finite fields, CM liftings problems

## Fellowships

- 07/11–today: Post-Doc, University of Heidelberg
- 09/09–06/11: Post-Doc, University of Duisburg-Essen
- 08/03–06/09: Teaching Assistant, University of Utah

## Education

- 2009 PhD in Mathematics, University of Utah
- 2003 Master's degree (Laurea) in Mathematics, University of Bologna
- 1999 High school diploma (Maturità), Liceo Copernico, 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.
- *Integral Tate modules and splitting of primes in torsion fields of elliptic curves.* <http://arxiv.org/abs/1201.2124>, submitted for publication.
- *On certain cusp forms on a definite quaternion.* <http://arxiv.org/abs/1108.1292>, submitted for publication.
- *Abelian varieties over the prime field.* Joint with J. Stix, in preparation.
- *Odd icosahedral extensions of  $\mathbb{Q}$  ramified at one prime only.* Joint with I. Kiming, in preparation.
- *On a result of Iwasawa on class numbers of number fields.* Preprint.
- *On supersingular elliptic curves over the prime field.* Preprint.

## Relevant Talks

- 6/13 - *On the splitting of primes in torsion fields*. Number Theory Seminar, University of California at Los Angeles.
- 2/13 - *Counting mod  $p$  Galois representation*. Special Trimester in Arithmetic and Geometry, Hausdorff Research Institute, Bonn.
- 4/12 - *A conjectural mass formula for mod  $p$  Galois representations*. Séminaire de Théorie des Nombres, Université Clermont Ferrand.
- 2/12 - *On torsion fields arising from elliptic curves*. Séminaire de Théorie des Nombres, Université Paris 6.
- 11/11 - *On certain cusp forms on a definite quaternion*. Number Theory Seminar, Humboldt–Universität zu Berlin.
- 09/11 - *Computing the number of certain Galois representations mod  $p$* . Computations with modular forms 2011, Universität Heidelberg.
- 05/11 - *On small image Galois representations*. Number Theory Seminar, University of Copenhagen.
- 3/11 - *Cusp forms on a definite quaternion and mod  $p$  Galois representations*. Number Theory Seminar, University of California at Los Angeles.
- 2/11 - *On certain cusp forms on a definite quaternion*. Seminario di Geometria, Università di Bologna.
- 7/10 - *Computing the number of certain Galois representations mod  $p$* . Summer 2010 Modular Conference, CRM, Universitat Autònoma de Barcelona
- 3/10 - *A conjectural mass formula for mod  $p$  Galois representations*. Séminaire de Théorie des Nombres, Université Paris 13 Nord.

## Conferences attended

- 07/12 - *Iwasawa 2012*, Universität Heidelberg.
- 06/12 -  *$p$ -adic Modular Forms and Arithmetic*, University of California at Los Angeles.
- 08/11 - *Computations with Modular Forms 2011*, Universität Heidelberg.
- 07/10 - *Modular Conference: Arithmetic of Modular Forms and Modularity results*, CRM, Universitat Autònoma de Barcelona.
- 09/09 - *Galois Theory and Explicit Methods, 3rd annual meeting*, Warwick Mathematics Institute.
- 03/08 - *Selmer groups,  $L$ -functions, and Galois Deformations*, University of California at Los Angeles.
- 07/07 - *Ecole d'été sur la conjecture de modularité de Serre*, Centre International de Rencontres Mathématiques, Luminy, France.
- 07/05 - *Représentations galoisienne*, Université Louis Pasteur, Strasbourg, France.

## 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

- Winter Semester 2010-11: Algebraic number theory (Teaching Assistant of prof. Gabor Wiese).

Universität Heidelberg

- Winter Semester 2013-14: Abelian Varieties I
- Summer Semester 2014: Abelian Varieties II