

Giovanni Di Matteo

Research interests: Number theory, p -adic Galois representations, p -adic Hodge theory, B -pairs, trianguline representations.

Practical information

Date of birth November 1983
Citizenship Dual US and Italian citizenship
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Education

- 2009–2013 **Ph.D. in mathematics**, *École Normale Supérieure de Lyon (France)*, under the direction of Laurent Berger, Thesis title: Produits tensoriels en théorie de Hodge p -adique. Defense date: 12 December 2013. Mention: Very honorable.
- 2006–2009 **Masters: Algebra, geometry, and number theory (ALGANT)**, *Università degli studi di Padova (Italy)* and *Université de Paris-Sud 11 (France)*. Masters thesis: *Serre's Minkowski-style bounds for finite subgroups of $GL_n(k)$ via étale cohomology*, under the direction of Luc Illusie.
- 2002–2006 **B.A. in pure mathematics**, *Albion College, Albion, Michigan*.
Mention: Cum laude, with credit hours earned at
- Budapest Semesters in Mathematics: spring 2005.
- University of California at Berkeley: summer 2003, 2002.
- Harvard Summer School Program: summer 2001, 2000.

Articles and preprints

On admissible tensor products in p -adic Hodge theory, *Compositio Mathematica*, **149** (2013), no. 3, pp. 417-219.

On triangulable tensor products of B -pairs and trianguline representations, *Submitted*.

Professional experience

J. J. Sylvester assistant professor, Department of Mathematics at Johns Hopkins University, (*Baltimore, Maryland*), July 2014 – June 2017.

Visitor at the IHÉS, (*Bures-sur-Yvette, France*), 1 Nov. 2013 – 1 Feb. 2014.

ATER at the ÉNS in Lyon, (*Lyon, France*), Oct. 2012 – Aug. 2013.

Awards

Joel Dean Award for excellence in teaching (Johns Hopkins University, 2017)

Talks

On triangulable tensor products of B -pairs

- Number Theory Seminar, Johns Hopkins University (September 2015)
- Séminaire théorie des nombres de l'IMJ-PRJ, Institut de mathématiques de Jussieu, U. Pierre & Marie Curie, Paris, France (February 2014)
- Séminaire de géométrie arithmétique et motivique, Institut Galilée, U. Paris 13, Villetaneuse, France (January 2014)

On admissible tensor products and Schur objects in p -adic Hodge theory

- Arithmetic and algebraic geometry seminar, Institut de Recherche Mathématique Avancée, Strasbourg, France (25 October 2012)
- Colloquium for young researchers in number theory, École Normale Supérieure of Lyon, Lyon, France (June 2012)

Expository talks at working groups and summer schools

Crystalline and semi-stable representations. Workshop on p -adic periods. ETH Zürich (June 2010)

Global duality in étale cohomology. Work group at the École Normale Supérieure of Paris: Introduction to p -adic comparison theorems (27 April 2009)

The proper base change theorem in étale cohomology. Work group at the École Normale Supérieure of Paris: Introduction to p -adic comparison theorems (30 March 2009)

Teaching experience

- 2016-2017 Lecturer for a graduate course on modular forms, and three sections of multivariable calculus at Johns Hopkins University (one during the summer)
- 2015-2016 Lecturer for linear algebra during the fall & spring semesters at Johns Hopkins University
- 2014-2015 Lecturer for elementary number theory, honors linear algebra, and a second graduate course in number theory at Johns Hopkins University
- 2012-2013 Jury member for bachelors thesis defenses, advisorship to undergraduates, problem-solving sessions for Algebra I and Algebra II, service in preparation for the external agregation in mathematics
- 2011-2012 Advisorship to undergraduates, problem-solving sessions for Algebra I and Algebra II, jury member for student English language math colloquium
- 2010-2011 Advisorship to undergraduates, problem-solving sessions for Algebra II, jury member for student English language math colloquium
- 2003-2006 Tutoring in calculus, linear algebra, and discrete mathematics.

Department service

Co-organizer for the department's number theory seminar, academic years 2015-2016 and 2016-2017

Languages

English (mother language), French, Italian