

BIOGRAPHICAL SKETCH FOR PETE L. CLARK

Name Peter Louis Clark (professionally: Pete L. Clark)

Date and Place of Birth June 28, 1976; Philadelphia, Pennsylvania

Citizenship United States of America

Professional Preparation

University of Chicago Mathematics BA, MS 1998

Harvard University Mathematics PhD 2003

Appointments

2006- Assistant Professor, University of Georgia

2006 Postdoctoral Fellow, MSRI

2003-2005 Postdoctoral Fellow, McGill University

2003 Visiting Scholar, University of Pennsylvania

Papers accepted for publication

[1] P.L. Clark, *Abelian points on algebraic curves*, to appear in Math. Research Letters.

[2] P.L. Clark and X. Xarles, *Local bounds for torsion points on abelian varieties*, to appear in Canadian J. Math.

[3] P.L. Clark, *On the Hasse principle for Shimura curves*, to appear in Israel J. Math.

[4] P.L. Clark, *Galois groups via Atkin-Lehner twists*, to appear in Proc. Amer. Math. Soc.

[5] P.L. Clark, *There are genus one curves of every index over every number field*, to appear in J. Reine Angew. Math.

[6] P.L. Clark, *On elementary equivalence, isogeny and isomorphism*, to appear in J. Théor. Nombres Bordeaux.

[7] G. Alon and P.L. Clark, *On the Number of Representations of an Integer by a Linear Form*, Journal of Integer Sequences, Vol. 8 (2005), Article 05.5.2

[8] P.L. Clark, *Period-index problems in WC-groups I: elliptic curves*, J. Number Theory 114 (2005), 193-208.

Papers submitted

- [9] *Rational points on semistable curves*, submitted to Manuscripta Math.
- [10] *An “Anti-Hasse Principle” for Prime Twists*, submitted to International J. Number Theory.
- [11] *Period-index problems in WC-groups II: abelian varieties*, submitted to Documenta Math.

Synergistic activities

(1) Leader of a 2005 summer research project for undergraduates, funded by the Institut Scientifique de Mathématiques (ISM). Topic: Almost sure limit sets of vector-valued Rademacher series.

(2) Participation in Elham Izadi’s 2006 VIGRE group on the Hodge Conjecture. My role is essentially that of a *de facto* “Hodge-theoretic TA,” i.e., someone whose knowledge of the material is not as deep as Prof. Izadi’s, but is sufficient to answer most graduate student questions and help out with proofs.

(3) Leader of a proposed 2007-2008 **VIGRE** group on rational points on CM elliptic curves.

(4) Submitted a proposal for a future Research Experience for Undergraduates (REU) based on (1) above.

Collaborators In the last two years I have collaborated with the following mathematicians:

Gil Alon, McGill University (now Technion, Israel).
 Alina Carmen Cojocaru, University of Illinois at Chicago.
 Joost van Hamel, University of Sydney.
 Dino Lorenzini, University of Georgia.
 Shahed Sharif, Niagara University.
 John Voight, MAGMA Group, Australia.
 Xavier Xarles, Universitat Autònoma de Barcelona, Spain.

Advisers and Mentors I have received significant help, guidance, and/or inspiration from the following mathematicians:

Barry Mazur, Harvard University (Thesis adviser).
 Henri Darmon, McGill University (Postdoctoral supervisor).
 Jean-Louis Colliot-Thélène, U. Paris Sud (mentoring at MSRI).
 Bjorn Poonen, U. California at Berkeley (mentoring at MSRI).
 Dino Lorenzini and Robert Rumely (mentoring at UGA).

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