

CV – RAJU KRISHNAMOORTHY

Contact Information

University of Georgia

Arithmetic Geometry Group

Boyd 633, University of Georgia
Athens, GA 30602

Full Name: Subrahmanya Krishnamoorthy

Email: [raju at math dot columbia dot edu](mailto:raju@math.columbia.edu)

Website: <http://www.math.columbia.edu/~raju>

Citizenship: United States

Employment

Limited Term Assistant Professor at UGA August 2018 - August 2020

NSF Postdoctoral Fellow at FU Berlin August 2016 - August 2018

Sponsor: Hélène Esnault

Education

•Undergraduate Institution

MIT, B.S. in Mathematics with Computer Science, January 2009

•Graduate Institution

Columbia University, M.A. in Mathematics, May 2011

Columbia University, M.Phil. in Mathematics, May 2014

Columbia University, Ph.D. in Mathematics, May 2016

Papers/Preprints

1. Raju Krishnamoorthy, Mao Sheng, *From mass formulas to modular embeddings via arithmetic Higgs bundles*, in preparation.
2. Raju Krishnamoorthy, Ambrus Pál, *Rank 2 Local Systems and Abelian Varieties*, arXiv 1089.02106, submitted.
3. Raju Krishnamoorthy, *Rank 2 Local Systems, Barsotti-Tate Groups, and Shimura Curves*, arXiv 1711.04797, submitted.
4. Raju Krishnamoorthy, *Correspondences without a Core*, arXiv 1704.00335, Algebra and Number Theory 12:5 (2018) 1173-1214.
5. Raju Krishnamoorthy, *Dynamics, Graph Theory, and Barsotti-Tate Groups: Variations on a Theme of Mochizuki*, PhD Thesis.
6. Ryan Daileda, Raju Krishnamoorthy, Anton Malyshev, *Maximal Class Numbers of CM Number Fields*. J. Number Theory 130:4 (2010) 936-943.

Awards

- NSF Postdoctoral Fellowship, 2016-2018
- President's Fellowship at Columbia University, 2010-2011
- Clay Academy Junior Fellow, 2005

Events organized

- HIMR workshop on p -adic coefficients, June 2019 (Imperial College, London).

Invited Talks

- Rank 2 local systems and abelian varieties, Universität Mainz, July 2019
- Rank 2 local systems and abelian varieties, TU München, June 2019
- Rank 2 local systems and abelian varieties, UC Irvine NT seminar, February 2019
- Rank 2 local systems and abelian varieties, Caltech NT seminar, February 2019
- Rank 2 local systems and abelian varieties, Columbia AG seminar, January 2019
- Rank 2 local systems and abelian varieties, Northwestern NT seminar, January 2019
- Analogs of the Hasse Invariant, UGA number theory seminar, September 2018
- Analogs of the Hasse Invariant, Humboldt Universität, May 2018
- Rank 2 local systems and abelian varieties, Autour de cycles algébriques (Paris), May 2018
- A motivated introduction to the companions conjecture, USTC Hefei, March 2018
- Correspondences without a Core, USTC Hefei, March 2018
- Analogs of the Hasse Invariant, TU München, February 2018
- Analogs of the Hasse Invariant, Universität Mainz, December 2017
- Analogs of the Hasse Invariant, UPenn AG, October 2017
- Rank 2 Local Systems and Abelian Varieties, BIRS (Banff), October 2017
- Analogs of the Hasse Invariant, Cornell AG, September 2017
- Analogs of the Hasse Invariant, FU Berlin Gästseminar, June 2017
- Dynamics and Graph Theory, FU Berlin Gästseminar January 2017
- Maximal Class Numbers of CM Number Fields, STAGE at MIT, 2008

Teaching

- Shaunalynn Duffy and I started a creative math class for children with [sprout](#) in Somerville, MA. 2009-2010.
- Taught Calculus 1 at Columbia, Spring 2013, Spring 2016
- Taught advanced undergraduate seminar on complex analysis and Riemann surfaces, Fall 2014
- Taught Calculus 1 at UGA, Fall 2018