

ROMYAR T. SHARIFI

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POSITIONS

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|-----------|---|
| 2016- | University of California, Los Angeles, Professor |
| 2013-2016 | University of Arizona, Professor |
| 2009-2013 | University of Arizona, Associate Professor |
| 2007-2009 | McMaster University, Associate Professor |
| 2004-2007 | McMaster University, Assistant Professor |
| 2003-2004 | Max Planck Institute for Mathematics, Guest |
| 2001-2003 | Harvard University, NSF Postdoctoral Research Fellow |
| 2000-2001 | University of Arizona, NSF VIGRE Postdoctoral Research Fellow |
| 1999 | Mathematical Sciences Research Institute, Postdoctoral Fellow |

EDUCATION

| | |
|-------------|---|
| June 1999 | Ph.D. in Mathematics, The University of Chicago |
| August 1995 | S.M. in Mathematics, The University of Chicago |
| May 1994 | B.A. in Mathematics and Physics, University of California, Berkeley |

AWARDS AND FELLOWSHIPS

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| 2020 | Fellow of the American Mathematical Society |
| 2014-2015 | Simons Fellowship in Mathematics |
| 2005-2009 | Canada Research Chair in Number Theory, Tier II |
| 2001-2003 | NSF Mathematical Sciences Postdoctoral Research Fellowship |

GRANTS

| | |
|-----------|--|
| 2025- | Simons Foundation, Travel Support for Mathematicians award |
| 2021-2025 | NSF Research Award DMS-2101889 |
| 2018-2023 | NSF Research Award DMS-1801963 (supplement awarded in 2021) |
| 2015-2019 | NSF Award for the Arizona Winter School in Arithmetic Geometry (co-PI) |
| 2014-2018 | NSF Research Award DMS-1401122/1661658 |
| 2014-2017 | NSF Focused Research Group Award DMS-1360583 |
| 2014-2015 | NSA MSP Standard Grant |
| 2013-2016 | NSF Award for the Southwest Center for Arithmetic Geometry |
| 2010-2012 | NSF Award for Iwasawa 2010 |
| 2009-2013 | NSF Research Award DMS-0901526 |
| 2007-2008 | NSF Award for Summer School on Iwasawa Theory (co-PI) |
| 2006-2009 | Ministry of Research and Innovation, Ontario, Early Researcher Award |

2005-2009 NSERC Discovery Grant

SHORT-TERM VISITS

| | |
|-----------------|--|
| Jan.-May 2023 | Simons Laufer Mathematical Sciences Institute (MSRI), Berkeley |
| Jan.-Mar. 2018 | Institute for Advanced Study, Princeton |
| Apr.-June 2015 | University of California, Los Angeles |
| Jan.-Feb. 2015 | University of Oxford |
| Oct.-Nov. 2014 | The University of Chicago |
| Aug.-Sept. 2014 | University of California, Berkeley |
| May-June 2010 | Institut des Hautes Études Scientifiques, Paris |
| July-Oct. 2009 | Isaac Newton Institute, Cambridge |
| May 07-Aug. 08 | The Fields Institute, Toronto |
| April 2007 | Univerisité de Caen |
| June 2006 | Institut des Hautes Études Scientifiques, Paris |
| Sept. 2005 | Le Centre de Recherches Mathématiques, Montréal |
| June-July 2005 | Max Planck Institute for Mathematics, Bonn |
| May-July 2002 | Universität Regensburg |
| May-July 2001 | University of Nottingham |

PUBLICATIONS

- Emmanuel Lecouturier, Romyar Sharifi, Sheng-Chi Shih, Jun Wang, Eisenstein cocycles for imaginary quadratic fields, submitted for publication, arXiv:2504.19125, 46 pages.
- Takako Fukaya, Kazuya Kato, Romyar Sharifi, Toroidal compactifications of the moduli spaces of Drinfeld modules, arXiv:2008.13376v2, 109 pages.
- Romyar Sharifi, An extension of the Fukaya-Kato method, *J. Eur. Math. Soc.* **28** (2026), 2877-2943.
- Akshay Venkatesh, Romyar Sharifi, Eisenstein cocycles in motivic cohomology, *Compos. Math.* **160** (2024), 2407-2479.
- Yeuk Hay Joshua Lam, Yuan Liu, Romyar Sharifi, Jiuya Wang, Preston Wake, Generalized Bockstein maps and Massey products, *Forum Math. Sigma* **11** (2023), 1-41.
- Romyar T. Sharifi, Reciprocity maps with restricted ramification, *Trans. Amer. Math. Soc.* **375** (2022), 5361-5392.
- Frauke Bleher, Ted Chinburg, Ralph Greenberg, Mahesh Kakde, Romyar Sharifi, and Martin Taylor, Exterior products in Iwasawa theory, *J. Eur. Math. Soc.* **24** (2022), 967-1005.
- Frauke Bleher, Ted Chinburg, Ralph Greenberg, Mahesh Kakde, George Pappas, Romyar Sharifi, and Martin Taylor, Higher Chern classes in Iwasawa theory, *Amer. J. Math.* **142** (2020), 627-682.
- Romyar Sharifi, Iwasawa theory: a climb up the tower, *Notices Amer. Math. Soc.* **66**, no. 1 (2019), 16-26.
- Takako Fukaya, Kazuya Kato, and Romyar Sharifi, Compactifications of S -arithmetic quotients for the projective general linear group, in Elliptic Curves, Modular Forms and Iwasawa Theory, In Honour of John H. Coates' 70th Birthday, *Springer Proc. Math. Stat.* **188**, Springer, 2016, 161-223.
- Takako Fukaya, Kazuya Kato, and Romyar Sharifi, Modular symbols and the integrality of zeta elements, *Ann. Math. Qué.*, Special Issue on the Occasion of the 60th Birthday of

- Glenn Stevens (Part II) **40** (2016), 377-395.
- Takako Fukaya, Kazuya Kato, and Romyar Sharifi, Modular symbols in Iwasawa theory, in Iwasawa Theory 2012 - State of the Art and Recent Advances, *Contrib. Math. Comput. Sci.* **7**, Springer, 2014, 177-219.
 - Romyar T. Sharifi, The reciprocity conjecture of Khare and Wintenberger, *Inter. Math. Res. Not. IMRN* **2014** (2014), 1409-1424.
 - Meng Fai Lim and Romyar T. Sharifi, Nekovář duality over p -adic Lie extensions of global fields, *Doc. Math.* **18** (2013), 621-678.
 - Romyar Sharifi, Galois module structure of local unit groups, *Algebra Number Theory* **7** (2013), 157-191.
 - Romyar Sharifi, A reciprocity map and the two-variable p -adic L -function, *Ann. of Math.* **173** (2011), 251-300.
 - Romyar T. Sharifi, Cup products and L -values of cusp forms, *Pure Appl. Math. Quart.* **5**, Special Issue: In honor of Jean-Pierre Serre (2009), 339-348.
 - Romyar T. Sharifi, On Galois groups of unramified pro- p extensions, *Math. Ann.* **342** (2008), 297-308.
 - Romyar T. Sharifi, Iwasawa theory and the Eisenstein ideal, *Duke Math. J.* **137** (2007), 63-101.
 - Romyar T. Sharifi, Massey products and ideal class groups, *J. reine angew. Math.* **603** (2007), 1-33.
 - Yoshitaka Hachimori and Romyar T. Sharifi, On the failure of pseudo-nullity of Iwasawa modules, *J. Alg. Geom.* **14** (2005), 567-591.
 - William G. McCallum and Romyar T. Sharifi, A cup product in the Galois cohomology of number fields, *Duke Math. J.* **120** (2003), 269-310.
 - Romyar T. Sharifi, Relationships between conjectures on the structure of pro- p Galois groups unramified outside p , in Arithmetic Fundamental Groups and Noncommutative Algebra, *Proc. Sympos. Pure Math.* **70**, Amer. Math. Soc., 2002, 275-284.
 - Romyar T. Sharifi, Determination of conductors from Galois module structure, *Math. Z.* **241** (2002), 227-245.
 - Romyar T. Sharifi, Minimal conductors of Kummer extensions by roots of unit elements, *J. Ramanujan Math. Soc.* **16** (2001), 101-117.
 - Romyar T. Sharifi, On norm residue symbols and conductors, *J. Number Theory* **86** (2001), 196-209.
 - Romyar T. Sharifi, Twisted Heisenberg representations and local conductors, Ph.D. thesis, The University of Chicago, 1999.
 - Romyar T. Sharifi, Ramification groups of nonabelian Kummer extensions, *J. Number Theory* **65** (1997), 105-115.
 - Romyar T. Sharifi, On cyclotomic polynomials, power residues, and reciprocity laws, *Enseign. Math.* **43** (1997), 319-336.

INVITED CONFERENCE TALKS

MPS Conference on the Eisenstein ideal and Galois representations: Looking forward after 50 years, May 2026.

Arithmetic, geometry, space and time: a workshop on the occasion of Minhyong Kim's 61st birthday, ICMS, Edinburgh (virtual talk), Nov. 2024.

Periods in algebraic geometry and automorphic forms (2 lectures), Nisyros, Greece, July 2024.
 Algebraische Zahlentheorie, Oberwolfach, Germany, June 2023.
 Eisenstein series and equivariant cohomology, Regensburg, Germany (virtual meeting), July 2021.
 Arithmetic quotients of locally symmetric spaces and their cohomology, CRM, Montréal, Quebec (virtual meeting), Oct. 2020.
 Iwasawa 2019, Bordeaux, France, June 2019.
 Eisenstein ideal and Iwasawa theory, Beijing, China, June 2019.
 Advances in Iwasawa theory, AMS Special Session, Honolulu, Mar. 2019.
 JHU-UMD Algebra and Number Theory Day, U. Maryland, Nov. 2018.
 Special values of automorphic L -functions and associated p -adic L -functions, BIRS, Oaxaca, Mexico, Oct. 2018.
 Arithmetic algebraic geometry — in honor the 60th birthday of Grzegorz Banaszak, Poznan, Poland, Aug. 2018.
 Profinite monodromy, Galois representations, and complex functions, RIMS, Kyoto, Japan, May 2018.
 Iwasawa theory and related topics, Heidelberg, Germany, May 2018.
 Low dimensional topology and number theory X, Fukaoka, Japan, Mar. 2018.
 Arizona Winter School 2018 on Iwasawa Theory (4 lectures), U. Arizona, Mar. 2018.
 Automorphic Forms and Arithmetic, AMS Special Session, Atlanta, Jan. 2017.
 Southern California Number Theory Day, UC Irvine, Oct. 2016.
 2016 Pan Asia Number Theory Workshop, Academica Sinica, Taipei, Taiwan, July 2016.
 Bay Area Algebraic Number Theory and Arithmetic Geometry Day, UC Berkeley, Apr. 2016.
 Palmetto Number Theory Series XXIV, Emory U., Sept. 2015.
 AMS Summer Institute in Algebraic Geometry, U. Utah, July 2015.
 Elliptic Curves, Modular Forms, and Iwasawa Theory – in honour of the 70th birthday of John Coates, Cambridge, Mar. 2015.
 Arithmetic Algebraic Geometry, CMS Special Session, Hamilton, Ontario, Dec. 2014.
 p -adic Modular forms, L -functions, and Galois Representations, UCLA, May 2013.
 Iwasawa theory and Galois representations, U. Warwick, Apr. 2013.
 Applications of Iwasawa algebras, BIRS, Banff, Canada, Mar. 2013.
 L -functions and Arithmetic, Seoul, Korea, Oct. 2012 (3 lectures).
 Iwasawa 2012, Heidelberg, Germany, July-Aug. 2012.
 p -adic Modular Forms and Arithmetic – in honor of Haruzo Hida's 60th birthday, UCLA, June 2012.
 Pro-unipotent Fundamental Groups: Arithmetic and Diophantine Aspects, Bellairs Research Institute, Barbados, May 2012.
 Cycles on Modular Varieties, BIRS, Banff, Canada, Oct. 2011.
 Development of Galois-Teichmüller theory and anabelian geometry, RIMS, Kyoto, Japan, Oct. 2010.
 Modular/Geometric Iwasawa Theory and p -adic L -functions, UCLA, June 2010 (3 lectures).
 Southern California Number Theory Day, UCSD, March 2010.
 Non-Commutative Algebra and Iwasawa Theory, ICMS, Edinburgh, Sept. 2009.
 Non-Abelian Fundamental Groups in Arithmetic Geometry: Introductory Workshop, Isaac Newton Institute, Cambridge, July 2009.
 IAS/Park City Mathematics Institute: Arithmetic of L -functions, Park City, Utah, July 2009.

Québec/Maine Number Conference on Number Theory, U. Laval, Oct. 2008.
 Canadian Number Theory Association X Meeting, U. Waterloo, July 2008.
 Conference in Honour of John Labute, Montreal, Nov. 2007.
 Algebraische Zahlentheorie, Oberwolfach, Germany, June 2007.
 Canadian Number Theory Association IX Meeting, UBC, Vancouver, July 2006.
 Iwasawa 2006, Limoges, France, July 2006.
 Pro- p Extensions of Global Fields and Pro- p Groups, Oberwolfach, Germany, May 2006.
 Galois Theory in Arithmetic and Geometry, AMS Special Session, Durham, NH, Apr. 2006.
 Field Extensions and Algorithms, AMS Special Session, San Antonio, Jan. 2006.
 Open Questions and Recent Developments in Iwasawa Theory – in honor of Ralph
 Greenberg's 60th birthday, Boston U., June 2005.
 Arithmetic Algebraic Geometry, AMS Special Session, Atlanta, Jan. 2005.
 Arithmetic Geometry, CMS Special Session, Montreal, Dec. 2004.
 Weekend Workshop on Arithmetic and Geometry of Higher Dimensional Varieties, Fields
 Institute, Oct. 2004.
 Iwasawa 2004, Besançon, France, July 2004.
 Algorithms and Number Theory, Schloss Dagstuhl, Germany, May 2004.
 Geometric Methods in Algebra and Number Theory, U. Miami, Dec. 2003.
 The John H. Barrett Memorial Lectures: Recent Progress in Arithmetic and Algebraic
 Geometry, University of Tennessee-Knoxville, April 2002.
 Arithmetic Aspects of Fundamental Groups, Maratea, Italy, Sept. 2001.
 NoMaDS (Nottingham-Manchester-Durham-Sheffield) Meeting, Sheffield, July 2001.
 Galois Theory and Explicit Methods, CIRM, Luminy, France, June 2001.
 Field Theory and Arithmetic, St. Etienne, France, May 2001.
 Number Theory with a Geometric Flavor, AMS Special Session, Las Vegas, April 2001.
 Graduate and Postdoctoral Education in Arithmetic Geometry: The Arizona Winter School,
 AMS Special Session, New Orleans, Jan. 2001.
 Galois Representations, AMS Special Session, Urbana-Champaign, May 1999.
 Midwest Algebraic Number Theory Day, UIUC, March 1997.
 Undergraduate Research, AMS Special Session, Eugene, June 1994.

EXTERNAL SEMINARS AND COLLOQUIA

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| 2026 | Boston College-MIT, Caltech, Michigan State (colloquium and seminar) |
| 2025 | VaNtAgE seminar (virtual), Columbia University |
| 2024 | Princeton-IAS, University of Maryland, McGill University, CRM Montreal (colloquium) |
| 2023 | SLMath (two seminars) |
| 2022 | UC San Diego (colloquium and seminar) |
| 2021 | Columbia-CUNY-NYU (virtual) |
| 2020 | University of Chicago, UC Berkeley (virtual) |
| 2019 | Harvard University, Arizona State (colloquium and seminar), Michigan State (colloquium), UC Santa Barbara (colloquium) |
| 2018 | Institute for Advanced Study (lecture series), Columbia-CUNY-NYU, University of Pennsylvania |
| 2017 | Stanford University |

2016 University of Texas at Austin, Duke University
 2015 UCLA (colloquium and seminar series), Caltech, UC San Diego
 2014 University of Washington, Columbia University, UC Berkeley
 2013 University of Oxford, Columbia University, Johns Hopkins University
 2012 UCLA (colloquium and seminar), Arizona State (colloquium and seminar),
 Northwestern University, University of Chicago, University of British Columbia
 2011 Northwestern University, University of Chicago
 2010 University of Texas at Austin
 2009 Institut de Mathématiques de Jussieu, University of Bristol, University of
 Birmingham, Stanford University, Arizona State (colloquium and seminar)
 2008 McGill University, University of Arizona, Duke University, Cornell University
 2007 Université de Franche-Comté, Université de Caen (seminar and lecture series)
 2006 University of Rochester, University of Western Ontario (colloquium)
 2005 McGill University, University of Western Ontario, Max Planck Institute for
 Mathematics, Ohio State University, UC San Diego, Rice University
 2004 University of Notre Dame, University of Wisconsin, University of Illinois at
 Urbana-Champaign, McMaster University, Queen's University, Boston University,
 Michigan State University, University of Virginia, Cambridge University,
 Universität Heidelberg, International University Bremen (colloquium)
 2003 University of Washington, University of California at Irvine, UC Santa Barbara,
 Universität Göttingen
 2002 Boston University, Columbia University, Brown University, Universität
 Regensburg, University of Arizona, UC Berkeley, Caltech, Amherst College,
 University of Massachusetts Amherst
 2001 University of London, Nottingham University, University of Arizona, Brandeis

EXTERNAL SERVICE

2022- Editor, Research in Number Theory
 2018- Member, Advisory Board, Arizona Winter School
 2014-2022 Editor, Proceedings of the American Mathematical Society
 2007-2009 Member, Research Committee, Canadian Mathematical Society

UNIVERSITY SERVICE

2024-2025 Undergraduate Council Liaison to Academic Program Review
 Committee, UCLA Academic Senate
 2022-2025 Member, Undergraduate Council, UCLA Academic Senate

CONFERENCE ORGANIZATION

Aug. 2027 Organizer, Around modularity, on the occasion of Chandrashekhara
 Khare's 60th Birthday, ICTS, Bangalore, India
 July 2026 Organizer, 2026 Nisyros Conference on Euler Systems, Nisyros, Greece
 Dec. 2022 Scientific Committee Member, PRIMA Congress 2022,
 Pacific Rim Mathematical Association, Vancouver, Canada
 Mar. 2015-2018 Organizer, Arizona Winter School, University of Arizona

Scientific Organizer, AWS 2018 on Iwasawa Theory
 Funded by NSF award DMS-1504537 (co-PI)
 Additional funding from Clay Mathematics Institute 2016-18 (co-PI)
 June 2016 Organizer, New directions in Iwasawa theory,
 Banff International Research Station
 Mar. 2013-2015 Lead Organizer, Arizona Winter School, University of Arizona
 Funded by NSF award DMS-1161523 (PI)
 Oct. 2011 Primary Organizer, Workshop on Iwasawa Theory, University of Arizona
 Funded by NSF award DMS-1005225 (PI)
 July 2010 Organizer, Iwasawa 2010, University of Toronto
 Funded by the Fields Institute (co-PI) and NSF award DMS-1005225 (PI)
 Dec. 2007 Organizer, Special Session on Iwasawa Theory, CMS Winter Meeting
 Aug. 2007 Primary Organizer, Summer School in Iwasawa Theory, McMaster Univ.
 Funded by the Fields Institute (PI) and NSF award DMS-0646805 (co-PI)
 June 2007 Contact Organizer, Modular Forms: Arithmetic and Computation,
 Banff International Research Station

RESEARCH WORKSHOP PARTICIPATION

APAW Collaborative Research Workshop, Project Group Leader, U. Oregon, Aug. 2022.
 Arizona Winter School 2018 on Iwasawa Theory, Project Group Leader, U. Arizona, Mar.
 2018.
 Arizona Winter School 2005 on Fundamental Groups in Arithmetic, Project Group Assistant,
 U. New Mexico, Mar. 2005.
 Arizona Winter School 2002 on Periods, Project Group Assistant, U. Arizona, Mar. 2002.

POSTDOCTORAL SUPERVISION

UCLA Niccolo' Ronchetti, Chi-Yun Hsu, Kim Tuan Do, Peter Xu
 U. Arizona Ashay Burungale
 McMaster Dragos Ghioca, Byoung-Du Kim, Ming-Lun Hsieh, Mahesh Agarwal,
 Soroosh Yazdani

GRADUATE SUPERVISION

2024 Timothy Smits, Ph.D. Thesis, Eisenstein cocycles for powers of the multiplicative
 group, UCLA
 2023 Frederick Vu, Ph.D. Thesis, A map in Sharifi's conjecture for non-exceptional
 characters and tame level, UCLA
 2021 Casey Fu, Ph.D. Thesis, Computing conductors of Kummer extensions via Galois
 module structure, UCLA
 2018 Jun Wang, Ph.D. Thesis, Invariants of modular curves and Sharifi's conjectures,
 University of Arizona
 2018 Sheng-Chi Shih, Ph.D. Thesis, On congruence modules related to Hilbert
 Eisenstein series, University of Arizona
 2016 Ronnie Scott Williams, Ph.D. Thesis, Level compatibility in the passage from
 modular symbols to cup products, University of Arizona

- 2016 Ding Ma, Ph.D. Thesis, Relations among multiple zeta values and modular forms of low level, University of Arizona
- 2015 Kevin Powell, Ph.D. Thesis, Modular symbols modulo Eisenstein ideals for Bianchi spaces, University of Arizona
- 2015 Matthew Lafferty, Ph.D. Thesis, Eichler-Shimura cohomology groups and the Iwasawa main conjecture, University of Arizona
- 2012 Dong Quan Nguyen, Ph.D. Thesis, Nonexistence of rational points on certain varieties, University of Arizona
- 2011 Richard Gottesman, M.S. Thesis, Some conductors of Kummer extensions of local fields, University of Arizona
- 2010 Meng Fai Lim, Ph.D. Thesis, Duality over p -adic Lie extensions of global fields, McMaster University
- 2006 Tara Davis, M.S. Thesis, Computations in Galois cohomology and Hecke algebras, McMaster University

CITIZENSHIP U.S.A.