

RUFEI REN

CURRICULUM VITAE

Dept. of Mathematics, University of Rochester

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Research Interests

p -adic Aspect of Modular Forms, Exponential Sums, Arithmetic dynamical system

Employment

Visiting Assistant Professor. Dept. of Mathematics, Univ. of Rochester, NY 2017-present

Education

Ph.D. Mathematics, University of California, Irvine 2012-2017
B.S. Mathematics, Fudan University 2008-2012

Honors and Awards

Departmental Fellowship (UC Irvine) Fall 2015

Papers and Preprints

1. *Slopes for higher rank Artin–Schreier–Witt towers* (with L. Xiao, D. Wan, and M. Yu), to appear in Trans. Amer. Math. Soc., arXiv:1605.02254.
2. *Generic Newton polygon for exponential sums in two variables with triangular base*, submitted, arXiv:1701.00254.
3. *Generic Newton polygon for exponential sums in n -variable with parallelotope base*, submitted, arXiv:1710.00137.
4. *Newton slopes for twisted Artin–Schreier–Witt Towers*, submitted, arXiv:1704.07017.
5. *Generic Newton polygon for exponential sums in two variables with convex polygon base*, in preparation.
6. *Spectral halo for Hilbert modular forms*, in preparation.

Teaching Experience

- 2014, Recitation for Math 2A/2B, Calculus, University of California, Irvine.
- 2015, Recitation for Math 3A, Elementary Linear Algebra, University of California, Irvine.
- 2016, Recitation for Math 173A, Introduction to Cryptology, University of California, Irvine.
- Fall 2017, Math 141, Calculus I, University of Rochester.
- Fall 2017, Math 165, Differential equation with linear algebra, University of Rochester.
- Spring 2018, Math 162, Calculus II, University of Rochester.
- Spring 2018, Math 236, Introduction of Algebra, University of Rochester.

Talks and Posters

<i>The p-adic Langlands program and related topics, Indiana U., Bloomington</i> (poster)	May 2016
<i>Research Conference on elliptic curves, modular forms, and related topics, U. Connecticut</i> (20-min talk)	Aug 2016
<i>Number Theory Seminar, Fudan University</i> (2-hour talk)	Aug 2016
<i>AMS Sectional Meetings, University of St. Thomas (Minneapolis campus)</i> (20-min talk)	Oct 2016
<i>Number Theory Seminar, UCSD</i> (1-hour talk)	Nov 2016
<i>Number Theory Seminar, University of Rochester</i> (1-hour talk)	Sept 2017
<i>AMS Sectional Meeting, University at Buffalo</i> (1-hour talk)	Sept 2017

Conferences and Summer Schools Attended

<i>Arithmetic of p-adic modular forms, L-functions, Shimura varieties and Galois representations (Haruzo Hida 60th birthday), UCLA</i>	Jun 2012
<i>p-adic variation in number theory (Glenn Stevens 60th birthday), Boston U</i>	Jun 2014
<i>Southern California Number Theory Seminar, UCI</i>	Oct 2014
<i>Automorphic forms, Shimura varieties, Galois representations and L-functions (Michael Harris 60th birthday), MSRI, Berkeley</i>	Dec 2014
<i>Southern California Number Theory Day (John Tate 90th birthday), UCSD</i>	May 2015
<i>The p-adic Langlands program and related topics, Indiana U., Bloomington</i>	May 2016
<i>Connecticut Summer School in Number Theory, U. Connecticut</i>	Aug 2016
<i>Southern California Number Theory Day, UC Irvine</i>	Oct 2016
<i>AMS Sectional Meeting, University at Buffalo</i>	Sept 2017