

# CV OF XIN WAN

September 19, 2016

## 1 Personal

- Born: November 6, 1985, China.
- Address: 560 Riverside Dr. APT 15E, New York, NY, 10027.
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## 2 Education

- B.S. Peking University, China, 2003-2007.
- Ph.D Princeton University, 2007-2012.  
Thesis Advisor: Christopher Skinner.
- Research Interest: Number Theory.  
More precisely: automorphic forms, Galois representations, Iwasawa theory, Birch and Swinnerton-Dyer conjecture and Bloch-Kato conjecture.

## 3 Work Experience

- September 2012-June 2013, Member, Institute for Advance Study, Princeton.
- September 2013-June 2016, Ritt Assistant Professor, Columbia University, New York.
- July 2016-Now, Associate Professor, Academy of Mathematics and Systems Science, Chinese Academy of Science.

## 4 Publication

All papers are available at <http://www.mcm.ac.cn/faculty/wx>.

- p-adic Eisenstein Series and L-Functions of certain cusp forms on definite unitary groups (joint with E.Eischen), Journal of the Institute of Mathematics of Jussieu, volume 15, issue 03, pp. 471-510, July 2016.
- Families of Nearly Ordinary Eisenstein Series on Unitary Groups (with an Appendix by Kai-Wen Lan), Algebra and Number Theory, 2015, 9-9, pp 1955-2054.
- Iwasawa Main Conjecture for Hilbert Modular Forms, Forum of Mathematics, Sigma, Volumn 3 (2015), e18, 95 Pages.
- Introduction to Skinner-Urban's Work on Iwasawa Main Conjecture, in Iwasawa Theory 2012, State of the Art and Recent Advances, Contributions in Mathematical and Computational Sciences, Vol. 7, Springer, 2014.
- Iwasawa Main Conjecture for Non-Ordinary Modular Forms, arXiv:1607.07729, 2016.
- $\Lambda$ -adic Gross-Zagier formula for elliptic curves at supersingular primes, (joint with F.Castella), arXiv:1607.02019, 2016.
- Iwasawa Main Conjecture for Rankin-Selberg p-adic L-functions, preprint arXiv:1408.4044, 2014.
- Iwasawa Main Conjecture for Supersingular Elliptic Curves, preprint, arXiv:1411.6352, 2015.
- Heegner Point Kolyvagin System and Iwasawa Main Conjecture, preprint, arXiv:1408.4043, 2014.
- Iwasawa Main Conjecture for Rankin-Selberg p-adic L-functions: Non-Ordinary Case, preprint, 2015.
- Iwasawa Main Conjecture for Heegner Points: Supersingular Case, Joint with Francesc Castella, preprint 2015.
- The Birch-Swinnerton-Dyer Formula For Elliptic Curves of Analytic Rank One, Joint with Dimitar Jetchev and Christopher Skinner, submitted to Inventiones mathematicae, arXiv:1512.06894.
- Iwasawa Theory For Unitary Groups, Thesis, Princeton University, 2012.

## 5 Invited Talks

- Automorphic Forms and Number Theory Seminar, Columbia University, November 2012.
- Number Theory Seminar, University of Illinois, Chicago, November 2012.
- Number Theory Seminar, University of North Carolina, Chapel Hill, November 2012.
- Number Theory Seminar, California Institute of Technology, January 2013.
- Palmetto Number Theory Series (PANTS), Clemson University, December 2013.
- IAS Program on Special Cycles and p-adic L-functions, HKUST, Hong Kong, January 2014.

- Number Theory Seminar, University of Minnesota, April 2014.
- Number Theory Seminar, McGill University, April 2014.
- Number Theory Seminar, Mathematics Morningside center Chinese Academy of Sciences, Beijing, June 2014.
- Joint IAS and Princeton University Number Theory Seminar, Princeton University, September 2014.
- “Counting Arithmetic Objects” Workshop, Montreal, November 2014.
- Automorphic Forms and Number Theory Seminar, Columbia University, November 2014.
- Number Theory Seminar, Beijing International center for Mathematical Research, Beijing, December 2014.
- Special Mathematics Seminar, MIT, January 2015.
- Number Theory Seminar, Laval University, Canada, February 2015.
- Number Theory Seminar, Boston University, March 2015.
- Number Theory Seminar, Northwestern University, March, 2015.
- Number Theory Seminar, University of Chicago, March, 2015.
- Number Theory Seminar, Morningside Center of Mathematics Chinese Academy of Sciences, Beijing, June, 2015.
- Pan Asian Number Theory Conference (in honor of the 70-th birthday of John Coates), Sanya, China, July, 2015.
- Number Theory Seminar, Purdue University, September 2015.
- Algebra Seminar, Indiana University Bloomington, November 2015.
- Algebra Seminar, Pennsylvania University, November 2015.
- Colloquium and Number Theory Seminar, University of Minnesota, February 2016.
- The 7th International Congress of Chinese Mathematicians (ICCM), 45 minutes talk. Beijing, Aug 6 - 11, 2016. ICCM7
- New Development of Elliptic Curves (Clay Institute of Mathematics Conference), Oxford University, UK, Sep 2016.

## 6 Teaching

- Teaching Assistant, 2008-2012, Princeton University.
- MAT 104, Fall 2011, Princeton University.
- Mini-course, “Introduction to Skinner-Urban’s work on Iwasawa Main Conjecture”, Iwasawa 2012 conference, Heidelberg, Germany.
- Calculus II sessions 4 and 5, fall 2013, Columbia University.
- Calculus II session 1, spring 2014, Columbia University.
- Calculus II sessions 2 and 3, fall 2014, Columbia University.
- Calculus II session 1, spring 2015, Columbia University.
- Research Seminar in Number Theory (graduated course organized by Dorian Goldfeld, contributed two lectures), spring 2015, Columbia University.
- Calculus III, sessions 3 and 5, fall 2015, Columbia University.
- Calculus IV, session 1, Spring 2016, Columbia University.
- Iwasawa Theory, Fall 2016, AMSS, CAS.

## 7 Honors

- Gold Medal, 44-th International Mathematical Olympiad, 2003, Tokyo, Japan.
- Mingde Undergraduate Scholarship, 2003-2007, Peking University.

## 8 Referee for

- Journal of American Mathematical Society;
- Journal of Number Theory;
- Proceedings, Iwasawa 2015 conference, King’s College London, UK.