Xuhua He's publication list

Published and accepted papers

1. D. Ciubotaru and X. He, *Cocenters of p-adic groups, III: Elliptic cocenter and rigid cocenter*, Peking Math J 4 (2021), 159–186.

2. X. He, *Cordial elements and dimensions of affine Deligne-Lusztig varieties*, Forum Math Pi 9 (2021), e9.

3. H. Bao and X. He, *A Birkhoff-Bruhat Atlas for partial flag varieties*, Indagationes Mathematicae 32 (2021), 1152–1173.

4. J. Adams, X. He and S. Nie, *Partial orders on conjugacy classes in the Weyl group and on unipotent conjugacy classes*, Adv. Math. 383 (2021), Paper No. 107688, 28 pp.

5. H. Bao and X. He, *Flag manifolds over semifields*, arXiv:2003.13209, to appear in Algebra and Number theory.

6. U. Görtz, X. He and M. Rapoport, *Extremal cases of Rapoport-Zink spaces*, Journal Inst. Math. Jussieu, https://doi.org/10.1017/S1474748020000730.

7. J. Adams, X. He and S. Nie, *From conjugacy classes in the Weyl group to semisimple conjugacy classes*, arXiv:1903.04089, to appear in Pure and Applied Mathematics Quarterly, special volume in memory of Bert Kostant.

8. X. He and Q. Yu, *Dimension formula of the affine Deligne-Lusztig variety*, Math. Ann. 379 (2021), 1747–1765.

9. X. He and R. Zhou, *On the connected components of affine Deligne-Lusztig varieties*, Duke Math. J. 169 (2020), no. 14, 2697–2765.

10. X. He, G. Pappas and M. Rapoport, *Good and semi-stable reductions of Shimura varieties*, J. Éc. polytech. Math. 7 (2020), 497–571.

11. X. He, S. Nie, *A geometric interpretation of Newton strata*, Selecta Math. (N.S.) 26 (2020), no. 1, Art. 4, 16 pp.

12. X. He, C. Li and Y. Zhu, *Fine Deligne-Lusztig varieties and arithmetic fundamental lemmas*, Forum Math. Sigma 7 (2019), e47.

13. U. Görtz, X. He and S. Nie, *Fully Hodge-Newton decomoposable Shimura varieties*, Peking Math. J. 2 (2019), no. 2, 99–154.

14. X. He and J-L. Kim, *Jordan Decompositions of cocenters of reductive p-adic groups*, Represent. Theory 23 (2019), 294–324.

15. X. He, *Cocenters of p-adic groups, II: Induction map*, Adv. Math. **345** (2019), 972–997.

16. X. He, *Some results on affine Deligne-Lusztig varieties*, Proceedings of the International Congress of Mathematicians, Rio de Janeiro 2018. Vol. II. Invited lectures, 1345–1365, World Sci. Publ., Hackensack, NJ, 2018.

17. X. He and G. Williamson, *Soergel calculus and Schubert calculus*, Bull. Inst. Math. Acad. Sin. (N.S.) **13** (2018), no. 3, 317–350.

18. X. He and S. Nie, *On the acceptable elements*, Int. Math. Res. Not. IMRN (2018), no. 3, 907–931.

19. X. He, *Cocenters of p-adic groups, I: Newton decomposition*, Forum Math. Pi **6** (2018), e2.

20. X. He and S. Nie, *On the μ-ordinary locus of a Shimura variety*, Adv. Math. **321** (2017), 513–528.

21. D. Ciubotaru and X. He, *Cocenters and representations of affine Hecke algebra*, J. Eur. Math. Soc. **19** (2017), 3143–3177.

22. X. He, *Note on affine Deligne-Lusztig varieties*, Proceedings of the Sixth International Congress of Chinese Mathematicians. Vol. I, 297–307, Adv. Lect. Math. (ALM), 36, Int. Press, Somerville, MA, 2017.

23. X. He and S. Nie, *Cocenters and representations of pro-p Hecke algebras*, Represent. Theory 21 (2017), 82–105.

24. J. Adams and X. He, *Lifting of elements of Weyl groups*, J. Algebra 485 (2017), 142–165.

25. T. Haines and X. He, *Vertexwise criteria for admissibility of alcoves*, Amer. J. Math. **139** (2017), 769–784.

26. X. He and M. Rapoport, *Stratifications in the reduction of Shimura varieties*, Manuscripta Math. 152 (2017), 317–343.

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30. X. He, *Centers and cocenters of* 0*-Hecke algebras*, Representations of reductive groups, 227–240, Prog. Math. Phys., 312, Birkhäuser/Springer, Cham, 2015.

31. X. He and T. Lam, *Projected Richardson varieties and affine Schubert varieties*, Ann. Inst. Fourier (Grenoble) 65 (2015), 2385–2412.

32. U. Görtz and X. He, *Basic loci of Coxeter type in Shimura varieties*, Camb. J. Math. 3 (2015), 323–353.

33. X. He and S. Nie, *P-alcoves, parabolic subalgebras and cocenters of affine Hecke algebras*, Selecta. Math. 21 (2015), 995–1019.

34. U. Görtz, X. He and S. Nie, *P-alcoves and nonemptiness of affine Deligne-Lusztig varieties*, Ann. Sci. Ècole Norm. Sup. 48 (2015), 647–665.

35. D. Ciubotaru and X. He, *Green polynomials of Weyl groups, elliptic pairings, and the extended Dirac index*, Adv. Math. 283 (2015), 1–50.

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38. X. He, K. Nishiyama, H. Ochiai and Y. Oshima, *Parametrization of orbits on double flag variety of finite type*, Transformation Groups 18 (2013), 1091-1136.

39. X. He, *Normality and Cohen-Macaulayness of local models of Shimura varieties*, Duke Math. J. 162 (2013), 2509–2523.

40. X. He and S. Nie, *Minimal length elements of finite Coxeter group*, Duke Math. J. 161 (2012), 2945–2967.

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65. U. Görtz, X. He and S. Nie, *Basic loci of Coxeter type with arbitrary parahoric level*, arXiv:2006.08838.

66. R. Ganapathy and X. He, *Tits groups of Iwahori-Weyl groups and presentations of Hecke algebras*, arXiv:2107.01768.

67. X. He, *Affine Deligne-Lusztig varieties associated with generic Newton points*, arXiv:2107.14461.

68. X. He, R. Zhou and Y. Zhu, *Stabilizers of irreducible components of affine Deligne–Lusztig varieties*, arXiv:2109.02594.