

KESHAV AGGARWAL

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EDUCATION

Expected 2019 Ph.D., Mathematics, The Ohio State University- Columbus, USA

Advisor: Prof. ROMAN HOLOWINSKY

GPA: 3.7/4.0

2008-2013 Dual BS-MS in Mathematics, Indian Institute of Science Education and Research- Mohali, India

MASTER'S THESIS: Theory of Elliptic Curves

Advisor: Prof. KAPIL H. PARANJPE

GPA: 9.6/10.0

RESEARCH INTERESTS

• Study of L -functions • Subconvexity bound problems for L -functions • Finite fields and related sums • Equidistribution problems in number theory • Automorphic forms • Representation theory of automorphic forms

MANUSCRIPTS

1. K. Aggarwal, *Weyl bound in t -aspect via a trivial delta method*, Arxiv: [1810.10479](https://arxiv.org/abs/1810.10479) (2018).
2. K. Aggarwal, R. Holowinsky, Y. Lin, Q. Sun, *The Burgess bound via a trivial delta method*, Arxiv: [1803.00542](https://arxiv.org/abs/1803.00542) (2018), *submitted*.
3. K. Aggarwal, S.K. Singh, *t -aspect subconvexity bound for $GL(2)$ L -functions*, ArXiv: [1706.04977](https://arxiv.org/abs/1706.04977) (2018), under revision for *Mathematika*.
4. K. Aggarwal, *Subconvexity Bound for Hecke character L -Functions of Imaginary quadratic Number fields*, ArXiv: [1712.00363](https://arxiv.org/abs/1712.00363) (2017).
5. K. Aggarwal, Y. Jo, K. Nowland, *Hybrid level aspect subconvexity for $GL(2) \times GL(1)$ Rankin-Selberg L -functions*, to appear in *Hardy-Ramanujan Journal*.

SELECTED TALKS AND POSTER PRESENTATIONS

- Nov 2018 Application of the trivial delta method towards subconvexity
Number theory seminar, Dept of Math, The Ohio State University, USA
- Sep 2018 Voronoi summation on $GL(2)$ for arbitrary additive twists
Math Graduate Student Seminar, The Ohio State University, USA

- Dec 2017 Counting lattice points and the Riemann hypothesis
First Alumni meet, Indian Institute of Science Education & Research, Mohali, India
- Oct 2017 Hybrid subconvexity bound for Hecke character L -functions of $\mathbb{Q}(\sqrt{-D})$
Number theory seminar, Dept of Math, The Ohio State University, USA
- Sep 2017 Subconvexity bound in t -aspect for Hecke character L -functions of $\mathbb{Q}(\sqrt{-D})$
Poster presented in *Diophantine Problems*, University of Manchester, UK
- Jan 2017 Subconvexity bound problems and the Circle method
International Conference on Number Theory,
Kerala School of Mathematics, Kozhikode, India
- Dec 2011 Roth's proof of Erdős- Turan conjecture
Advanced Training in Mathematics School for Lecturers on Number Theory
Harish-Chandra Research Institute, Allahabad, India

TEACHING EXPERIENCE

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|---|---|
| Calculus I | TA in Au' 13, Sp' 14, Su' 14 and Su' 15 at Ohio State University |
| Calculus II for Engineering | TA in Au' 14 at Ohio State University |
| Calculus III | TA in Sp' 15, Au' 15, Sp' 16, Sp' 18, Au' 18 at Ohio State University |
| Refresher course in Algebra
for PhD students | TA in Su' 16 and Su' 18 at Ohio State University |
| Teachers' training course
for incoming graduate students | Lead TA in Su '17 at Ohio State University |

SERVICE

- 2018 Reviewed an article for *Advances in Mathematics*
- 2016-17 Graduate student representative in the Graduate Studies Committee, Department of Mathematics, The Ohio State University, Columbus

AWARDS

- 2015 Phil Huneke Excellence in Teaching Award for 2014-15, Department of Mathematics, The Ohio State University, Columbus
- 2013 President's Gold Medal for Academic Excellence at IISER Mohali, India
- 2013 Shyama Prasad Mukherjee Fellowship (not availed) and national rank 4 in CSIR-NET Mathematics held in Dec 2012
- 2006 - 2013 Kishor Vaigyanic Protsahan Yojana (KVPY) Scholarship awarded by Dept. of Science and Technology, Govt. of India