

# Anup Haldar

Curriculum Vitae

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[ResearchGate Profile](#)

## Current Position

### Assistant Professor

Department of Mathematics, A.P.C.R Govt College,  
Himachal Bihar, Matigara, Siliguri – 734010, West Bengal, India

## Research Interests

Number Theory, Quadratic Forms,  $L$ -functions, Algebraic Geometry, Arithmetic Geometry.

## Education

- **Ph.D. in Mathematics** (2026)  
Research Topic: Small Solutions of Quadratic Forms  
Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI), Belur Math, Howrah – 711202
- **M.Sc. in Mathematics** (2019)  
Indian Institute of Technology Bombay, Mumbai
- **B.Sc. in Mathematics** (2017)  
Jadavpur University, Kolkata

## Publications

1. Stephan Baier, Arkaprava Bhandari, and **Anup Haldar**, “Small solutions to inhomogeneous and homogeneous quadratic congruences modulo prime powers,” *Research in Number Theory* (2026).  
DOI: [10.1007/s40993-026-00714-5](https://doi.org/10.1007/s40993-026-00714-5)
2. Stephan Baier, Nilanjan Bag, and **Anup Haldar**, “Multiple exponential sums and their applications to quadratic congruences,” *Mathematische Nachrichten*, Vol. 298(11) (2025).  
DOI: [10.1002/mana.70063](https://doi.org/10.1002/mana.70063)
3. Nilanjan Bag and **Anup Haldar**, “Fourth power mean of the general  $s$ -dimensional Kloosterman sum mod  $p$ ,” *Finite Fields and Their Applications*, Vol. 94 (2024), Article 102355.  
DOI: [10.1016/j.ffa.2023.102355](https://doi.org/10.1016/j.ffa.2023.102355)
4. **Anup Haldar**, “Equidistribution of Solutions of Ternary Quadratic Congruences Modulo Prime Powers,” *Research in Number Theory*, Vol. 10 (2024), Article 47.  
DOI: [10.1007/s40993-024-00535-4](https://doi.org/10.1007/s40993-024-00535-4)
5. Stephan Baier and **Anup Haldar**, “Asymptotic Behavior of Small Solutions of Quadratic Congruences in Three Variables Modulo Prime Powers,” *Research in Number Theory*, Vol. 8 (2022), Article 58.  
DOI: [10.1007/s40993-022-00360-7](https://doi.org/10.1007/s40993-022-00360-7)

6. Stephan Baier and **Anup Haldar**, “Small Pythagorean triples modulo prime powers,” *arXiv preprint* (2022).  
[arXiv:2201.05871](https://arxiv.org/abs/2201.05871)

## Skills

- Advanced knowledge of Number Theory, Algebra, and Combinatorics.
- Experience with mathematical software (SageMath,  $\text{\LaTeX}$ ).
- Research collaboration and project management.

## Languages

- English (Fluent)
- Hindi (Fluent)
- Bengali (Native)

## References

Available upon request.

Last updated: April 19, 2026