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## Personal Information

Name Jyothsnaa Sivaraman  
Gender Female  
Nationality Indian

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## Employment

Mar 2021 – **Postdoctoral fellow**, *Department of Mathematics, Chennai Mathematical Institute*,  
Present Chennai, India.  
Mentor: Prof. Purusottam Rath.  
Aug 2019 – **Postdoctoral fellow**, *Department of Mathematics, University of Toronto*, Toronto,  
Jan 2021 Canada.  
Mentor: Prof. V. Kumar Murty.

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## Education

2016–2019 **Senior Research Fellow**, *The Institute of Mathematical Sciences*, Chennai, India,  
Completed Doctorate in Mathematics.  
Thesis title: On Euclidean ideal classes in abelian extensions,  
Thesis advisor: Prof. Sanoli Gun.  
2014–2016 **Junior Research Fellow**, *The Institute of Mathematical Sciences*, Chennai, India,  
Completed Master of Science in Mathematics.  
Master's thesis title: Aspects of Diophantine approximation,  
Thesis advisor: Prof. Sanoli Gun.  
2008–2012 **Bachelor of Engineering**, *Birla Institute of Technology and Science, K.K.Birla  
Goa campus*, Goa, India.  
Specialized in Electrical and Electronics.

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## Research Interest

Analytic aspects of algebraic numbers

[Algebraic Number Theory](#)

Euclidean algorithm, Euclidean ideal classes, Class Field Theory

[Analytic Number Theory](#)

Sieve methods

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## Publications/ Preprints

### Accepted papers

- Has appeared **Existence of Euclidean ideal classes beyond certain rank**, Jyothsnaa Sivaraman, in J. Ramanujan Math. Soc., 34, No.4 (2019), 427-432.
- Has appeared **On Euclidean ideal classes in certain abelian extensions**, Jean-Marc Deshouillers, Sanoli Gun, Jyothsnaa Sivaraman, Math. Z., 296 (2020), no. 1 - 2, 847-859.
- Has appeared **On existence of Euclidean ideal classes in real cubic and quadratic fields with cyclic class groups**, Sanoli Gun, Jyothsnaa Sivaraman, Michigan Math. J., 69 (2020), no. 2, 429-448.
- Has appeared **Primitive roots for Pjateckii-Šapiro primes**, Jyothsnaa Sivaraman, J. Th. Nombres Bordeaux, 33 (2021) no. 1, 83-94.

### Submitted

- Submitted **Euclidean ideal classes in cubic fields**, V. Kumar Murty, Jyothsnaa Sivaraman.
- Submitted **On the refined Koblitz conjecture**, Sampa Dey, Arnab Saha, Jyothsnaa Sivaraman, Akshaa Vatsani.

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## Invited talks

19. Delivered a talk on 31st Aug 2021 at the Women in Numbers 5 conference held online.
18. Delivered a talk on 12th May 2021 at the seminar of the Indian number theory working group, Institute of Mathematical Sciences, Chennai, India.
17. Delivered a talk on 12th Mar 2021 at the Queens University number theory seminar, Queen's University, Kingston, Canada.
16. Delivered a talk on 6th Nov 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.
15. Delivered a talk on 22nd Oct 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.
14. Delivered a talk on 3rd Oct 2020 at the American Mathematical Society's Fall sectional meeting, held online at Pennsylvania State University, Pennsylvania, USA.
13. Delivered a talk on 18th Aug 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.
12. Delivered a talk on 28th May 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.
11. Delivered a talk on 23rd Apr 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.

10. Delivered a talk on 21st Jan 2020 at the GANITA seminar, University of Toronto, Toronto, Canada.
9. Delivered a talk on 13th Nov 2019 at the GANITA seminar, University of Toronto, Toronto, Canada.
7. Delivered a talk on 12th Sept 2019 at the GANITA seminar, University of Toronto, Toronto, Canada.
6. Delivered a talk on 8 th Dec 2019 at the GANITA seminar, University of Toronto, Toronto, Canada.
5. Delivered a talk on 14 th Feb 2019 at the Indo-Japan meeting held at the Institute of Mathematical Sciences, Chennai, India.
4. Delivered a talk on 18 th Jan 2019 at the Indo-French conference held at the Institute of Mathematical Sciences, Chennai, India.
3. Delivered a talk on 4 th Jan 2019 at the conference on Diophantine approximation, transcendence, topological dynamics and topics in related areas of number theory and combinatorics held at Ramakrishna Mission Vivekananda Educational and Research Institute, Belur, Kolkata, India.
2. Delivered a talk on 17 th Dec 2018 at the Inter-city number theory seminar held at Indian Institute of Science Education and Research, Tirupati, India.
1. Delivered a talk on 14 th Oct 2018 at the Workshop on modular forms held at Kerala School of Mathematics, Kozhikode, India.

## Conferences / Schools attended

15. Balu Fest held online at the Institute of Mathematical Sciences during Mar 12-18, 2021.
14. American Mathematical Society Fall sectional meeting held online at the Pennsylvania State University during Oct 3-4, 2020.
13. Women in Numbers 5 held in Canada, 2020
12. CMS winter meeting held in Toronto, Canada during Dec 6-9, 2019.
11. Indo-Japan meeting held at the Institute of Mathematical Sciences, Chennai, India during Feb 13-15, 2019.
10. Indo-French conference held at the Institute of Mathematical Sciences, Chennai, India during Jan 16-18, 2019.
9. Workshop and conference on Diophantine approximation, transcendence, topological dynamics and topics in related areas of number theory and combinatorics held at Ramakrishna Mission Vivekananda Educational and Research Institute, Belur, Kolkata, India during Jan 03-13, 2019.
8. Inter-city number theory seminar held at Indian Institute of Science Education and Research, Tirupati, India during Dec 17-18, 2018.
7. Workshop on modular forms held at Kerala School of Mathematics, Kozhikode, India during Oct 12-14, 2018.

6. The mathematics of Artin's conjectures held at Yerevan state university, Yerevan, Armenia during May 21-25, 2018.
5. Number theory: arithmetic, diophantine and transcendence held at Indian Institute of Technology Ropar, Ropar, India during Dec 22-25, 2017.
4. Transcendental Numbers and Special Values of Dirichlet Series held at Indian Institute of Technology Ropar, Ropar, India during Dec 16-21, 2017.
3. International conference on number theory held at Kerala School of Mathematics, Kozhikode, India during Jan 9-13, 2017.
2. Number theory conference on arithmetic geometry and L-functions held at Kerala School of Mathematics, Kozhikode, India during Aug 17-21, 2016.
1. A conference in number theory held at the Institute of Mathematical Sciences, Chennai, India during Dec 14-18, 2015.

### Visits to Other Institutions

6. Brock University, St. Catharines, Canada on Jan 10, 2020.
5. Brock University, St. Catharines, Canada on Oct 24, 2019.
4. Harish-Chandra Research Institute, Allahabad, India during Sep 22-Oct 7, 2018.
3. Harish-Chandra Research Institute, Allahabad, India during Dec 5-13, 2017.
2. Institut de Mathématiques de Jussieu - Paris Rive Gauche, Paris, France during Jul 3-31, 2017
1. Harish-Chandra Research Institute, Allahabad, India during Jan 22-29, 2017.

### Teaching Experience

9. Course Instructor for Algebraic number theory, at the Chennai Mathematical Institute, Chennai, India, September 23 - December 31, 2021
8. Course Instructor for MAT223F : Linear algebra, at the University of Toronto, Toronto, Canada, Sept 10, 2020 - Dec 20, 2020
7. Course Instructor for MAT223S : Linear algebra, at the University of Toronto, Toronto, Canada, Jan 6, 2019 - Apr 25, 2020
6. Course instructor for MAT188F : Linear algebra held at the University of Toronto, Toronto, Canada, Sept 1 - Dec 25, 2019
5. Tutorial Assistant for a course in Linear algebra, at the Chennai Mathematical Institute, Chennai, India, Aug 1-Nov 30, 2017
4. Tutorial Assistant in AIS School on Class field theory , at the Chennai Mathematical Institute, Chennai, India, May 8-27, 2017
3. Tutorial Assistant for a course in Algebra II -Galois theory held at The Institute of Mathematical Sciences, Chennai, India, Jan 1-Apr 30, 2017
2. Tutorial Assistant for Refresher course on Algebraic number theory for college teachers held at Kerala School of Mathematics, Kozhikode, India Feb 9-12, 2017.
1. Tutorial Assistant for a course on Complex analysis held at Chennai Mathematical Insitute, Chennai, India Jan 1-Apr 30, 2016.

## Computer skills

C, SAGE, Java, LaTeX

## Link to my webpage

<https://jyothsnaasivaraman.github.io/homepage>