

Yajushi Srivastava Integrated PhD Student Department of Mathematics, IISER Tirupati, Andhra Pradesh - 517507

Nationality : Indian

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#### EDUCATIONAL QUALIFICATIONS

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Integrated PhD IISER Tirupati	CGPA - 9.3/10	September 2020-Present
B.Sc. in Mathematics, Physics, Chemistry Navyug Kanya Mahavidyalaya, Lucknow University, UP	79.11%	2017-2020
Senior School Certificate Examination (SSCE, CBSE)	91.4%	2017
Secondary School Examination (SSE,CBSE)	CGPA - 10/10	2015

### ACADEMIC ACHIEVEMENTS

- Received the Academic Excellence Award -2023, IISER Tirupati
- Cleared IIT-JAM 2020 Mathematics with AIR 139.

# CONFERENCES/ TALKS ATTENDED/UPCOMING

- Math Expository Lecture Series conducted by Department of Mathematics , IISER Tirupati, January 2021-April 2021.
- French Indian Workshop ENS-IISER, May 2021 (jointly conducted by ENS, France and IISER, India) on Exchange of practices on Education and Pedagogical approaches.
- Inter IISER-NISER Mathematics Meet, July 2021, hosted by IISER Tirupati.
- Mathe-Gespräche Talk Series conducted by IISER Tirupati, August 2021 March 2022 .
- Advanced Instructional Schools (AIS) Topics in Birational Geometry (2023-Upcoming)

## PROJECTS

- Fourier analysis under the guidance of Dr. Lakshmi Lavanya Ramamurthy, IISER Tirupati. (May 2021 July 2021) Studied Hilbert spaces, the theory of Fourier analysis and applied it to the case of finite Abelian groups.
- Introductory abstract harmonic analysis under the guidance of Dr. Lakshmi Lavanya (August 2021 November 2021) Ramamurthy, IISER Tirupati.

Studied the generalisation of the concepts of Fourier analysis in the context of locally compact Abelian groups ; Haar integral and its properties.

• Introduction to Algebraic K-Theory under the guidance of Dr. Girja Shanker Tripathi, (January 2022 - May 2022) IISER Tirupati

Computed  $K_0(\mathcal{R})$  for principal ideal domain (PID) and for local rings. Studied the Dedekind domains and their characterisation and proved that the ring of algebraic integers in a number field is a Dedekind domain.

## TEACHING ASSISTANCE

- MTH-211 Multivariable calculus Monsoon Semester
- MTH-221 Basic Structures in Mathematics Spring Semester

(August 2022 - November 2022)

(January 2023 - April 2023)

**REFERENCES** Dr. Girja Shanker Tripathi Dr. Anilatmaja Aryasomayajula

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