

JAYDEEP KANDEKAR

Ludwig-Maximilians-Universität München, Germany

Email: Jaydeep.Kandekar@physik.uni-muenchen.de

Linkedin: <https://in.linkedin.com/in/jaydeep-kandekar-268aba219>

GitHub: <https://github.com/JaydeepKandekar>

Website: <https://jaydeepkandekar.github.io/About-me/>

EDUCATION

Ludwig-Maximilians-Universität München, Germany

Apr 2023 - Present

Master of Science, Astrophysics

Savitribai Phule University, Pune, IN

2019 - 2022

New Arts, Commerce and Science College, Ahmednagar, IN

Bachelor of Science

Percentage: 93.82 %

**Maharashtra State Board of Secondary
and Higher Secondary education, Pune, IN**

Passing month & year: May 2019

*Maharashtra Arts, Commerce and Science Junior College,
Ahmednagar, IN*

Higher Secondary Certificate (HSC)

percentage: 74.46 %

**Maharashtra State Board of Secondary
and Higher Secondary education, Pune, IN**

Passing month & year: June 2017

*Auxilium Convent High School and Junior College
Ahmednagar, IN*

Secondary School Certificate (SSC)

percentage: 90.40 %

PROJECTS/RESEARCH EXPERIENCE

Understanding massive solar eruption with radio observations.

(Remote Internship)

May 2022 - Present

*Supervisor: Dr. Anshu Kumari Singh, NASA Postdoctoral Program Fellow,
United States of America*

- Type II CME event selection.
- Event data analysis, handling FITS files.
- Study of evolution of type II CME.
- Plotting frequency and time spectra using sunpy.
- Working on a research paper.

The Impact of Sagittarius Dwarf galaxy and Milky way galaxy

May 2022 - July 2022

Supervisor: Dr. Payel Das, University of Surrey, UK

(Remote Internship)

- Studied Galaxy formation and evolution.
- Studied the Impact of Sagittarius Dwarf galaxy and Milky Way galaxy.
- The velocity dispersion profile of stars after the impact was determined using impulse approximation method.

- Integrated the Orbit of Stars after the Impact.

Photometric data analysis of variable stars using Maxim DL.

Jan 2022 - June 2022

*Supervisor: Mr. Anirudh Deshpande, Vice president Jyotirvidya Parisantha,
Pune-411030, IN*

- Studied the variable stars and their types.
- Collected the data of a star named SZ LYN using a observatory.
- Analysed the photometric data using Maxim DL pro suite.
- Plotted a light curve of magnitude v/s time period of a star named SZ LYN.
- The variations in the magnitude and time period was calculated using MS Excel.

SKILLS AND SOFTWARE PROFICIENCY

TECHNICAL SKILLS:

- **Languages:** Python(elementary proficiency), C/C++, Overleaf, Maxima.
- **OS:** Windows 7, 8, 9 ,10 ,11, Linux, and UBUNTU.
- **Productivity/software tools:** Microsoft office, GitHub, Google sheets, Google docs, Adobe Photoshop, Podcast(anchor), Maxim DL pro suite.
- **IDEs:** Arduino IDE, and Jupyter.
- **Python tools:** scipy, numpy, astropy, gwpy, sunpy.

Astronomical Instrumentation:

- **Telescopes:** 6" to 12" Newtonian Reflector, Sky-Watcher 150 EQ, Celestron 130 EQ-RA motor.
- **Mounts:** German Equatorial mount.
- **Sensors:** CCD Camera and DSLR camera.

SUMMER SCHOOLS, WORKSHOPS, AND CONFERENCES

SUMMER SCHOOL/WINTER SCHOOL:

- [ICTP International school](#) on Cosmology 2022.
- [ICTP-IAEA International Winter school](#) on Radioactive waste packaging 2021.
- [DAWN Winter School on Astrophysics](#) organized by University of Copenhagen, Denmark 2022.
- [Introductory Summer School](#) in Astronomy and Astrophysics, IUCAA, IN.

WORKSHOPS:

- SAGAN Caltech Workshop on Exoplanets 2021.

RESEARCH INTERESTS

- Gravitational Physics/The General Theory of Relativity.
- Cosmology.
- High Energy Astrophysics.
- Radio Astronomy.

INVITED PRESENTATIONS

- “Introduction to \LaTeX : Getting started with \LaTeX and overleaf” at Sir Parshurambhau College, Pune. Nov 2022
(participants-30)
- “Stars and HR diagrams” at Progressive education society’s Modern College of Science, Ganeshkhind, Pune. Jan 2021
(participants-200)
- “Introduction to Cosmology and the Origin of the universe” at Zeal College of Engineering, Narhe, Pune. Jan 2020
(participants-70)

EXHIBITIONS

Inter-University centre for Astronomy and Astrophysics (Participants 500) Feb 2020
Topic: National Science Day 2020.

- *Presented a poster on “History of Moon”.*
- *Explained about the “origin of the universe”.*
- *Participated through Jyotirvidya Parisanstha (www.jvppune.in)*

International Centre for Theoretical Science’s CosmicZoom virtual Exhibition (ICTS-TIFR) (participants 2000) Mar 2021
Topic: Virtual Exhibition, Duration: 2 months.

- *Explained about “Evolution of human species”.*
- *Presented a poster on “Stars, Galaxies, Black holes and the Universe”.*

Indian Institute of Astrophysics, Bengaluru Feb 2021
Topic: Virtual Exhibition.

- *Presented a video on “birth and the fate of Black Holes”.*

VOLUNTEER SERVICE

- Organized a Stargazing event at [Sir Parshurambhau College, Pune](#) 2019 and 2020.
- Volunteered for [Jyotirvidya Parisanstha’s](#) “Variable Stars Observations” at the Observatory(KJO).
- Helped [Jyotirvidya Parisanstha](#) in organizing an event on “International Moon Observation Day/Night”.

REFERENCE

- [Dr. Anshu Kumari Singh](#), University of Helsinki, Finland.
- [Mr. Anirudh Deshpande](#), Vice president [Jyotirvidya Parisantha](#), Pune-411030, IN