JAYDEEP KANDEKAR

Ludwig-Maximilians-Universität München, Germany

Email: Jaydeep.Kandekar@physik.uni-muenchen.de
GitHub: https://github.com/JaydeepKandekar
Website: https://jaydeepkandekar.github.io/Portfolio/

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.

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 LaTeXand 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