JAYDEEP KANDEKAR

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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

Maharashtra Arts, Commerce and Science Junior College,

Passing month & year: May 2019

Ahmednagar, IN

Higher Secondary Certificate (HSC)

percentage: 74.46 %

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

Auxilium Convent High School and Junior College

Ahmednagar, IN

Secondary School Certificate (SSC)

percentage: 90.40 %

Passing month & year: June 2017

PROJECTS/RESEARCH EXPERIENCE

Understanding massive solar eruption with radio observations. (Remote Internship)

May 2022 - Present

Jan 2022 - June 2022

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.

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.

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- 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. (participants-30)

Nov 2022

• "Stars and HR diagrams" at Progressive education society's Modern College of Science, Ganeshkhind, Pune. (participants-200)

Jan 2021

 "Introduction to Cosmology and the Origin of the universe" at Zeal College of Engineering, Narhe, Pune. (participants-70)

Jan 2020

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