

# JAYDEEP KANDEKAR

Ludwig-Maximilians-Universität München, Germany

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## EDUCATION

**Ludwig-Maximilians-Universität München, Germany**

Apr 2023 - Present

**Master of Science, Astrophysics**

**New Arts, Commerce and Science College, Ahmednagar, IN**

2019 - 2022

*Savitribai Phule University, Pune, IN*

**Bachelor of Science**

Percentage: 93.82 %

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

Passing month & year: May 2019

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

**Higher Secondary Certificate (HSC)**

percentage: 74.46 %

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

Passing month & year: June 2017

*Maharashtra State Board of Secondary and Higher Secondary education, Pune, 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 an 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  $\text{\LaTeX}$ : Getting started with  $\text{\LaTeX}$ 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.  
(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](http://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](#)