

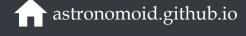
# RISHABH SINGH TEJA PhD Student

Indian Institute of Astrophysics Bengaluru, Karnataka, India-560034

Namaste! Hello! Greetings! I am a Ph.D. student working on the photometric and spectroscopic observations, analysis, and modeling of Core-Collapse Supernovae. I love to do Science as well as Data Science. Presently, I am trying to understand the demises of massive stars in our Universe.













### EDUCATION

### **High School (10th)** 2011-2012

**1st Division** 

Hilton Convent Senior Secondary School, Amroha, UP-244221 Hindi, English, Maths, Science, and Social Studies

#### **Intermediate (12th)** 2012 - 2014

**1st Division** 

Hilton Convent Senior Secondary School, Amroha, UP-244221 Maths, Physics, Chemistry, English, and Physical Education

### **Graduation (B.Sc. (H) Physics)** *2014–2017*

**1st Division** 

Ramjas College, University of Delhi, Delhi-110009 Physics and related subjects + Mathematics and Chemistry (2 sem)

### **Post-Graduation (M.Sc. Physics)** *2017–2019*

**1st Division** 

Department of Physics & Astrophysics, University | **IGOId Medall** of Delhi, Delhi-110009

[Affiliation: Hansraj College, University of Delhi] Classical, Quantum, Stastitical, Nuclear (Lab+Theory), Electrodynamics, GR & Cosmology, and Astronomy

#### Ph. D. (Astronomy & Astrophysics) 2019 - ongoing

Indian Institute of Astrophysics, Bengaluru, Karnataka-560034 [Affiliation: Pondicherry University]

Topic: Observational and theoretical studies of low-redshift corecollapse supernovae

# **PUBLICATIONS**

- SN 2020jfo: A Short-plateau Type II Supernova from a Low-mass Progenitor Rishabh Singh Teja et al 2022 ApJ 930 34 DOI:- https://doi.org/10.3847/1538-4357/ac610b
- Optical studies of a bright Type Iax supernova SN 2020rea Mridweeka Singh et al. 2022...MNRAS 517 (4), 5617-5626
- SN 2018gj: A Short-plateau Type II Supernova with Persistent Blue-shifted Hα Emission Rishabh Singh Teja et al. 2023 [Submitted to ApJ]
- Observational properties of a bright type Iax SN 2018cni and a faint type Iax SN 2020kyg Mridweeka Singh et al. 2023 [Revision Submitted to ApJ]

# PUBLICATIONS [Non-Refereed]

• GRB 210204A: Optical Observations from HCT Rishabh Singh Teja et al., ...GRB Coordinates Network 29414, 1

[Continued...]

# Interests/Hobbies/Others

- Love playing both indoor and outdoor games such as Table Tennis, Badminton, Volleyball, Cricket, and Chess
- Love reading fiction books
- Ardent Cinema lover
- Tech enthusiast
- Worked on different committes at school and college level
- Presently involved in editorial & design roles for IIA's science e-Magazine 'DOOT'
- Part of institute's computer committe as student representative

# **Philosophy**

I have always believed in working hard with honesty. I am always eager to learn new things, whether new tools, concepts, or even sports. I have always been a very keen listener and love to hear about different things from everyone. I believe in self-learning and followed it most of my life. I have experienced that, howsoever challenging things may seem, if we keep working hard, it eventually bears fruit and presents us with wonderful outcomes. I like to do everything with utmost dedication and passion.

# **Socities**

• **Life member**, Astronomical Society of India (ASI) [**L2454**]

• **AT2022wgv is a galactic CV** *H Kumar et al., ...* The Astronomer's Telegram 15644, 1

# PRESENTATIONS (Talk/ Poster)

- Poster presented on "Observational studies of a short plateau Type IIP supernova 2020jfo" at ASI 2022 Meet, Roorkee, India (March 2022)
- Poster presented on "Observations and modelling of two Type IIP supernovae in M61" in "IAU Symposium 361: Massive Stars Near and Far", Ballyconnell, Ireland (May 2022)
- Contributory talk given on "Panchromatic observations and modeling of two Type II supernovae in M61: Similar origins yet different fates" in "Young Astronomers' Meet 2022", ARIES, Nainital, India (Nov 2022)
- E-poster preseted on "Origins of a short plateau type II supernova SN 2020jfo: low mass RSG or binary?" in SuperVirtual 2022, (Nov 2022)
- Talk on "Understanding Type IIP progenitors with empashis on short plateau Type II Supernovae" in Indo/Japan Supernova workshop at Hiroshima University, Japan (March 2023)

## **SKILLS**

### **Tools / Softwares**

MESA Star, STELLA, IRAF, PyRAF, Git, LINUX, SYNAPPS, TARDIS, vim

### **Programming Languages**

*Python , C and C++* 

## Languages

Hindi (Mother Tongue), English, Punjabi(Speak)

# Data Reduced & Used

Himalayan Chandra Telescope (HCT), India; Swift/UVOT; GROWTH India Telescope, Devasthal Optical Telescope, India

# **Others**

MS-Office, matplotlib, scipy, jupyter-notebooks, Tkinter, HTML, CSS, Javascript, Adobe InDesign, LaTeX, Machine Learning Basics

# OTHER ACHIEVEMENTS

- Awarded certificate of merit in high school (CGPA 10.0)
- *Under top 10 in the district in high school results*
- Qualified written NDA/NA written Examination (2013)
- Qualified written CDS examination twice (2015, 2016)
- Qualified IIT-JAM (2017)
- Awarded Dr. K.S. Krishnan Gold Medal for highest marks in the University in M.Sc (2019)
- Qualified national level CSIR-NET (once) (2018)
- Qualified national level CSIR-JRF (twice) (2018, 2019)
- Qualified national level GATE exam (2019)