

CURRICULUM VITAE

MAHENDRA KUMAR VERMA

Born : 1986, January 28

Nationality : Indian

Material status : Unmarried

Mailing address :

Mahendra Kumar Verma, SoS. In Physics and Astrophysics
Pt. Ravishankar Shukla University Raipur(Chhattisgarh)-492010, INDIA
Mob. : 08962269262
Email : mahendverma@gmail.com
Web Page: <https://9827.github.io/mahendra>

Residence:

Kedarbadi ward No.-3 Dongargarh, Dist- Rajnaadgaon, State- Chhattisgarh ,India pin- 491445
Mobile- 8962269262

Languages Known

- Hindi, Chhattisgari (mother tongue)
- English (medium of education)
- Learned Telugu as 3rd language at school level

Education :

- Higher Secondary (physics, Chemistry, Mathematics, Hindi, English) , Board of Secondary education (2004) from School JNV Dongargarh.
- B.Sc (physics, Mathematics, Computer Science, Hindi, English),Pt. Ravishankar Shukla University Raipur(2007) .
- M.Sc Physics, School of Physics and Astrophysics PRSU Raipur (2009), Pt. Ravishankar Shukla University Raipur.
Project title: To Study the light curve of V711 Tau Binary star, School of Physics and Astrophysics PRSU Raipur (2009).
- In 2012, qualified the Ph.D Entrance exam From Pt. Ravishankar Shukla University Raipur and Completed Ph.D course work at SoS in physics and Astrophysics (PRSU) ,
- In 2014, registered as Research scholar (Ph.D) under the Supervision Prof. S.K.Pandeyand Co-Supervision Dr. Sudhanshu Barway Indian Institute of Astrophysics Baguluru.
- In 30 December 2022, Thesis has been submitted entitled **A Study of Central Regions of Lenticular (S0) Galaxies**

Field of Research : -

Observational Astronomy, Galaxy Formation and evolution, galaxy bulges, composite bulge

Publications:

- Mahendra Verma, Laxmikant Chaware , Sudhanshu Barway and S.K. Pandey”
The central region of classical bulges of S0 galaxies” (Manuscript No.JOAA-D-22-00279)
- Mahendra Verma, Avinash Singh, laxmikant Chaware:, (IOP Journal) “Photometric Study of the nuclear region of the galaxy NGC 5689 (Under Review)“ ID 24, with Positive comment

Supervisor:

Prof. S.K.Pandey (SOS Physics and Astrophysics, Raipur)

Co-Supervisor

Dr. Sudhanshu Barway

Indian Institute Of Astrophysics (IIA) Bangalore, Karnatak

Reserch Project:

INDO-SOUTH AFRICAN FLAGSHIP PROGRAMME IN ASTRONOMY

Title: Galaxy Evolution: simulations, observations and data analysis.Duration: 2016 – 2018

Research Interests

Central Regions of Galaxies,Multi-Wavelength study of Galaxies. Surface Photometry of Galaxies
Structure and Evolution of Lenticular Galaxies/bulges

Data reduction and Analysis

- :- IRAF, PYRAF, STSDAS
- :- Two Dimensional bulge disc decomposition (GALFIT), Tiny Tim
- :- SExtractor, Topcat,
- :- Python(Astropy, Matplotlib, pandas etc.)

Teaching Experience

Post Held Guest lecturer in Physics At SOS in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur

- :- Taught Astronomy and Astrophysics to M.Sc. III rd and IV th Semester During 7/8/2015 to 30/04/2016, Also take M.Phil classes

- :- Taught Astronomy in M.Sc III, IV Semester, Atomic Physics in M.Sc III Semester ,
Numerical analysis in M.Sc IInd Semester and observational astronomical techniques to Ph.D
course work students During season of 2017

Post Held Guest lecturer in Center for Basic Sciences, Pt. Ravishankar Shukla University, Raipur

- :- Taught, Magneto statistics, Statistical Mechanics, Atomic Physics, and Nuclear physics In center
for basic sciences (CBS RAIPUR) during season of 2017-18.

Invited Talk and Resource Person

- Poster Presentation and delivered a talk in National Conference on Signal Processing, Sustainable Energy Material and Astronomy and Astrophysics, NSSEMA - 2017 "Multiwavelength photometric study of a sample of radio loud early type galaxies"
- Delivered a talk at the Workshop on Science and Technology in Astronomy Research (STAR 2022), at SoS in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur (C.G.) 15-18 October, 2022, entitled "**Galaxy Evolution and Formation**".
- Work as resource person in Five Day National Workshop on LaTeX for Mathematician and Physicists at Center for Basic Sciences, Pt. Ravishankar Shukla University, Raipur (C.G.) 20-24 March, 2023

Science Outreach Activities (Actively participated throughout my PhD)

:- Active participation in organizing sky gazing programs and other science popularization activities held by the School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur,

:- Using small telescopes, conducted sky gazing such as showing planets, moon, nebula, etc. and using a balloon planetarium to demonstrate the solar planet system etc., to school students at Inspire camp (during my PhD) hosted by Pt. RSU Raipur.

:- Conducted sky gazing programs and other science popularization activities in JNV Mana (Raipur) (2017).

:- On behalf of the science centre Raipur, a Three-day visit to Ramkrishna Mishan Narayanpur for the sky gazing programs (youth mela 2018).

Computer Skill

Language Known: FORTARAN, PYTHON, HTML

Operating System: Linux, Windows,

Packages and softwares

IRAF, PYRAF (general purpose image reduction and analysis software), TOPCAT (Virtual Observatory tools), GNU PLOT, LA TEX, SEXTRACTOR, Tiny Tim, Github

Frequently used data archives

SDSS sky server, NED, Vizier, HST Legacy Archive, Hyperleda, NASA/IPAC, Spitzer IPAC/IRSA, MAST, ADS

Participation in conferences/Schools/Workshops

- Participate at Aries training school of observational astronomy(ATSOA-2014) 28 February to 12 March 2014.

- Workshop on Galaxy and Cosmology at the National Center For Radio Astrophysics of the Tata Institute of fundamental Research, From 7th July to 18th July 2014.
- Winter school on “The central region of spiral galaxies”,held on 12-23 January 2015 at IUCAA, Pune (INDIA).
- National Workshop on Astronomy with Small telescopes in the School of Physical Sciences during December 8-11, 2015, S.R.T.M. University, Nanded (INDIA)
- Attend IFAS2 (Second Indo-French Astronomical School) during July 11-16, 2016, Lyon, France) on “**Galaxy Formation and Evolution - Models to interpret**” observations. Also presented my work.
- Participate Astrostatistics Course at IUCAA, Pune during 2-10 Jan 2017.
- Poster presentation in NSSEMA 2023, 2nd National Conference on Signal Processing, Sustainable Energy Materials And Astronomy & Astrophysics(March 16-18, 2023). Topic of the poster is “Photometric Study of the nuclear region of the galaxy NGC 5689”.

References

Prof. S. K. Pandey

Pt. Ravishankar Shukla University, Raipur
Raipur - 492010, C.G.,INDIA.
Email: proskp@gmail.com

Dr. Sudhansu Barway

Scientist
Indian Institute of Astrophysics (IIA)
Bangalore(Karnatak)
Email: sudhanshu.barway@iiap.res.in