# Keshav Aggarwal

## PERSONAL DETAILS

PHONE: +91 7723846496

keshavagg1098@gmail.com or mscphd2301121015@iiti.ac.in **EMAIL:** 

FIND ME: ResearchGate, LinkedIn

#### EDUCATION

Ph.D. in Astronomy (Prime Minister's Research Fellowship) **JUL 2023 - PRESENT** 

Supervisor: Prof. Abhirup Datta, DAASE, Indian Institute of Technology (IIT) Indore Exploring space weather and its effect on planetary atmospheres using radio occultation

AUG 2021 - APR 2023 M.Sc. Astronomy

Supervisor: Prof. Abhirup Datta, DAASE, Indian Institute of Technology (IIT) Indore

Study of the Solar Corona using Indian Mars Orbiter Mission

**JULY 2018 - JUNE 2021** Bachelor of Science, J.V. Jain College, Choudhury Charan Singh University, UP, India

### **PUBLICATIONS**

Refereed Journals

Keshav Aggarwal, R. K. Choudhary, Abhirup Datta, Takeshi Imamura; On the estimation of Solar wind velocity under varying Solar activity conditions using Akatsuki measurements (Submitted to MNRAS)

Keshay Aggarwal, R. K. Choudhary, Abhirup Datta, Roopa M. V. Bijoy K. Dai.; Insights into Solar Wind Flow Speeds from the Coronal Radio occultation Experiment: Findings from the Indian Mars Orbiter Mission 10.3847/1538-4357/adb627

Conference proceedings Keshav Aggarwal, R. K. Choudhary, Abhirup Datta; On the estimation of solar wind velocity using spectral characteristics of the probing radio signals: Results from solar occultation measurements using Indian Mars Orbiter Mission" at 6th Indian Planetary Science Conference, IIT Roorkee (Submitted to Springer Nature as conference proceedings)

For other publications, please refer to my personal webpage.

# Workshops, Schools, and Presentations

Mar 2025	Results from Radio Occultation studies using Indian Mars Orbiter Mission" at <b>6th Indi</b> a	an Planetary
	Science Conference, IIT Roorkee	•

Oct 2024 "Results from Radio Occultation studies using Indian Mars Orbiter Mission" at 6th URSI Regional Conference on Radio Science (URSI RCRS), GEHU Bhimtal India

"Results from Radio Occultation studies using Indian Mars Orbiter Mission" at 3rd Indian Space Weather Oct 2024 Conference, IIT Roorkee

Oct 2023 Unveiling Space Weather and Planetary Atmosphere Dynamics through Aditya-L1 and DISHA Data Integration" at 2nd Indian Space Weather Conference, PRL Ahmedabad

Retrieving sulphuric acid profiles of Venus Atmosphere from Radio Occultation data from Akatsuki space-Sep 2023 craft" at Venus Science Conference, PRL Ahmedabad

"Venus PT profiles in 3D using RO" at Exoplanet conference: "Strange new worlds", IISER pune Aug 2023

Feb 2023 ISRO-ARIES Aditya-L1 Support Cell Workshop by IIT-BHU, Varanasi

Mar 2022 Spring 2022: ERS Post-Launch Data Challenge for JWST, organized at Baltimore, MD, USA, and Heidelberg, Germany

#### ACHIEVEMENTS

Early Career Researcher award for Best poster at the 6th Indian Planetary Science Conference, IIT Mar 2025

Contributed to Venus Mission White Paper titled 'Venus: The perfect laboratory for understanding Feb 2024 interactions between space weather and planetary atmospheres', submitted to ISRO

## INTERNSHIPS

AUG 2022 - SEP 2023 Researcher in AI and Orbital Mechanics | HR Coordinator at

ERETS Space London, London (Remote)

Developing algorithms for the AI/ML and orbital mechanics for the satellites. Responsible for fulfilling the hiring requirements for the team as per need.

FEB 2022 - AUG 2022 Data Analyst | Project Coordinator at

Armstrong Space Australia, Melbourne (Remote)

Building pipelines for data acquisition and processing space debris data.

Working towards solving the problem of space debris using laser ablation method.

Developing catalogues for space debris between 1 and 10cm.