

# Ritali Ghosh

## Graduate Student, Indian Institute of Science

I am a Graduate Student at the Indian Institute of Science (IISc), Bengaluru, India. My research interests are in astrophysical fluid dynamics using computational techniques and cosmological simulations of galaxy formation. I am presently working on idealized simulations to understand the environmental influences on various components of the galaxy undergoing ram-pressure stripping.



## Experience

2021-08 - Present	<b>Senior Research Fellow</b> Indian Institute of Science, Bengaluru
2019-08 - 2021-07	<b>Junior Research Fellow</b> Indian Institute of Science, Bengaluru



## Education

2015-06 - 2017-05	<b>Master of Science, Physics</b> University of Calcutta, Kolkata, India
2012-06 - 2015-05	<b>Bachelor of Science, Physics</b> Bethune College, Kolkata, India



## Publications

**Ram pressure stripping in clusters: Gravity can bind the ISM but not the CGM, 2023**

Submitted to MNRAS

*Ritali Ghosh, Alankar Dutta, Prateek Sharma*

**Beyond profiles: Using log-normal distributions to model the multiphase circumgalactic medium, 2023**

Submitted to MNRAS ([arXiv:2310.03717](https://arxiv.org/abs/2310.03717))

*Alankar Dutta, Mukesh Singh Bisht, Prateek Sharma, Ritali Ghosh, Manami Roy and Biman B. Nath*



## Talks and Research Visits

**Conference Talk, Astronomical Society of India Meeting, ASI 2024**

01 Feb – 04 Feb 2024

organized by the Astronomical Society of India (ASI) at IISc Bangalore, India

**Seminar Talk, Universitäts-Sternwarte München, Germany**

November 2023

At Weekly CAST Meeting, USM, Muenchen, Germany

**Conference Talk, Modelling of Multiphase Astrophysical Media, Aspenstein Castle at Lake Kochel, Bavaria**

30 May - 02 June 2023

organized by Max Planck Institute for Astrophysics, Garching, Germany

**Conference Talk, GALFLOWS 2023: A National Workshop on Galactic inflows and outflows on all Scales**



## Contact

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## Technical Profile

- C/C++, Python, Fortran, LATEX
- Tools/Codes used: PLUTO, ParaView, Cloudy
- Ability to Work in a Team
- Critical thinking and problem solving



## Languages

English (proficient)

Hindi (native speaker)

Bengali

German (A1 level)

02 - 05 February 2023

organized by Inter University Campus of Astronomy and Astrophysics (IUCAA), Pune

**Conference Talk, What matter(s) around galaxies 2022: Connecting the dots between the CGM and the larger-scale environment**

12 - 16 September 2022

organized by Università Milano-Bicocca at Champoluc, Aosta Valley, Italy

**Seminar Talk, Max Planck Institute for Astrophysics, Garching, Germany**

September 2022

MPA Cosmology Seminar, Garching, Germany

**Seminar Talk, Dipartimento di Fisica e Astronomia, INAF, Italy**

September 2022

at INAF, the Italian National Institute for Astrophysics, Padua, Italy

**Poster Presentation, Astronomical Society of India Meeting, ASI 2022**

March 2022

organized by the Astronomical Society of India (ASI) at IIT Roorkee, India

**KITP Program: Fundamentals of Gaseous Halos (Online Attendee)**

January 2022

organized by Kavli Institute for Theoretical Physics, Santa Barbara, California, USA



## Academic Awards

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### National Level Qualified Examinations

- Qualified GATE Fellowship 2019
- Qualified UGC-JRF NET December 2018
- Qualified JEST 2019

### Academic Achievements and Scholarships

- Ranked 5th in University of Calcutta, M.Sc. Batch 2015-17
- DST-INSPIRE Scholarship 2012-2017
- Mamraj Agarwal Rashtriya Puraskar, 2012 (*felicitated for scoring 96.6% in CBSE Class XII Exams, 2012 by the then Governor of West Bengal, India*)
- Certificate of Merit in Mathematics 2012 (*for being in top 0.1% of All India Senior School Certificate Exam, 2012 in Mathematics (Score: 100%)*)



## Teaching Experience

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Teaching Assistantship, PH 365, Galaxies and the Interstellar Medium, Joint Astronomy and Astrophysics Program (JAP), IISc

January 2023 — May 2023

Teaching Assistantship, PH 363, Introduction to Fluid Mechanics and Plasma Physics, Joint Astronomy and Astrophysics Program (JAP), IISc

August 2021 — December 2021



## References

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Prof. Prateek Sharma, Indian Institute of Science, Bangalore, India

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Dr. Max Gronke, Max Planck Institute for Astrophysics, Garching, Germany

[maxbg@mpa-garching.mpg.de](mailto:maxbg@mpa-garching.mpg.de)