

# Agnibha Banerjee

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## Education

The Open University, UK <i>PhD Student</i>	Present
• Exploring Exo-Venuses with JWST   Supervisor: Dr Joanna Barstow	
Indian Institute of Science Education and Research (IISER), Kolkata <i>B.S. - M.S. Dual Degree in Physics</i>	2021
• CGPA: 9.08/10	
Adamas International School <i>Class XII, Council for the Indian School Certificate Examinations (CISCE)</i>	2016
• Percentage: 97.0%	

## Research Experience

Indian Institute of Science Education and Research (IISER), Kolkata <i>Supervised by: Dr. Dibyendu Nandi</i> Masters Thesis Project	Sep. 2020 - Jul. 2021
• Learned and implemented techniques for atmospheric retrieval of exoplanets.	
McGill University, Montreal <i>Supervised by: Dr. Nicolas B. Cowan</i>	May 2019 - Aug. 2019
• Implemented analytical models for calculating the incident light map on ultra-short period exoplanets.	
Indian Institute of Technology (IIT), Indore <i>Supervised by: Dr. Bhargav Vaidya</i>	Jun. 2018 - Jul. 2018
• Developed a Monte Carlo radiative transfer code in Python to generate output images when a light beam passes through an optical density grid.	

## Publications

<i>Early Release Science of the exoplanet WASP-39b with JWST NIRSpec PRISM</i> Rustamkulov, Z., Sing, D.K., Mukherjee, S. et al. <i>Nature</i> 614, 659–663 (2023)
<i>Identification of carbon dioxide in an exoplanet atmosphere</i> JWST Transiting Exoplanet Community Early Release Science Team <i>Nature</i> 614, 649–652 (2023)
<i>Modelling the atmosphere of lava planet K2-141b: implications for low and high resolution spectroscopy</i> Nguyen, T.G.; Cowan, N.B.; Banerjee, A.; Moores, J.E. <i>Monthly Notices of the Royal Astronomical Society</i> , 499, 4605, 2020

## Awards & Recognitions

Second Prize at The Open University Graduate School Poster Competition	Jun. 2022
MITACS Globalink Research Internship	May 2019 - Aug. 2019
Top 1% (Top 25) in the National Graduate Physics Examination	Jun. 2018
Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship	Aug. 2017
Jagadis Bose National Science Talent Search Senior Scholarship	Oct. 2016

## Skills

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<b>Programming</b>	Python, Java, C, SQL, JavaScript, LaTeX, Git/GitHub
<b>Software</b>	MATLAB, Mathematica
<b>Operating Systems</b>	Linux, Windows, MacOS
<b>Languages</b>	English, Bengali, Hindi

## Conferences & Workshops Attended

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<b>JWST Proposal Planning Workshop</b> , Hertfordshire	Jan. 2023
<b>Ariel Consortium</b> , Bologna (Online)	Oct. 2022
<b>UK Exoplanets Meeting 2022</b> , Edinburgh	Aug. 2022
<b>STFC Introductory Summer School in Astronomy</b> , Dundee	Aug. 2022
<b>GRADnet NPL Summer School</b> , London	Jul. 2022
<b>NEMESIS Users Meeting 3</b> , Oxford	Jun. 2022
<b>British Planetary Science Conference, 2022</b> , Milton Keynes	Jun. 2022
<b>Ariel General Meeting</b> , Online	Jun. 2022
<b>Astrobiology Mars Rover Workshop</b> , Milton Keynes	Apr. 2022
<b>RAS Specialist Discussion: Exoplanet modelling in the JWST era</b> , London (Online)	Apr. 2022
<b>ERS Data Challenge with Simulated Data Workshop</b> , Online	Mar. 2022
<b>ERS Pre-Launch Theory Webinar (JWST)</b> , Online	Jul. 2021
<b>Code/Astro 2021</b> , Caltech (Online)	Jun. 2021
<b>European Astronomical Society Annual Meeting 2021</b> , Leiden (Online)	Jun. 2021
<b>Saas-Fee Course 2020</b> , NCCRS, Bern (Online)	Mar. 2021
<b>Exoplanets III</b> , Heidelberg (Online)	Jul. 2020
<b>2020 Sagan Exoplanet Summer Virtual Workshop</b> , NExSci, Caltech (Online)	Jul. 2020
<b>Canadian Astronomy Society (CASCA) Annual General Meeting 2019</b> , McGill University, Montreal	Jun. 2019
<b>Nvidia GPU Based High Performance Computing Workshop</b> , IISER, Kolkata	Oct. 2019
<b>Introductory Summer School on Astronomy and Astrophysics</b> , IUCAA, Pune	May 2018

## Institute Service & Volunteering

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President <i>RocSoc, The Open University</i>	2023
Volunteer <i>GAIA Data Release 3 Outreach Event, Teesside</i>	Jun. 2022
Volunteer <i>European Astronomical Society Annual Meeting 2021</i>	Jul. 2021
Data Analyst and Website Designer <i>CESSI IISER Kolkata outreach initiative on COVID-19</i>	Jun. 2020 - Jul. 2021
Class Representative <i>Department of Physical Sciences, IISER Kolkata</i>	Aug. 2019 - Jul. 2020