

# Agnibha Banerjee

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## Education

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The Open University, UK <i>PhD Student</i>	Present
<ul style="list-style-type: none"><li>Exploring Exo-Venuses with JWST   Supervisor: Dr Joanna Barstow</li></ul>	
Indian Institute of Science Education and Research (IISER), Kolkata <i>B.S. - M.S. Dual Degree in Physics</i>	2021
<ul style="list-style-type: none"><li>CGPA: 9.08/10</li></ul>	
Adamas International School <i>Class XII, Council for the Indian School Certificate Examinations (CISCE)</i>	2016
<ul style="list-style-type: none"><li>Percentage: 97.0%</li></ul>	

## Research Experience

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Indian Institute of Science Education and Research (IISER), Kolkata <i>Supervised by: Dr. Dibyendu Nandi</i> Masters Thesis Project	Sep. 2020 - Jul. 2021
<ul style="list-style-type: none"><li>Learned and implemented techniques for atmospheric retrieval of exoplanets.</li></ul>	
McGill University, Montreal <i>Supervised by: Dr. Nicolas B. Cowan</i>	May 2019 - Aug. 2019
<ul style="list-style-type: none"><li>Implemented analytical models for calculating the incident light map on ultra-short period exoplanets.</li></ul>	
Indian Institute of Technology (IIT), Indore <i>Supervised by: Dr. Bhargav Vaidya</i>	Jun. 2018 - Jul. 2018
<ul style="list-style-type: none"><li>Developed a Monte Carlo radiative transfer code in Python to generate output images when a light beam passes through an optical density grid.</li></ul>	

## Publications

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<i>Effect of centrifugal force on transmission spectroscopy of exoplanet atmospheres</i> Banerjee, A.; Barstow, J.K.; Haswell, C.A.; Lewis, S.R. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 523, L64, 2023	
<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

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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
DST INSPIRE Scholarship	Aug. 2016
Top 1% all-India in Class XII Examinations	Mar. 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 Webbinar (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 RocSoc, The Open University	2023
Volunteer GAIA Data Release 3 Outreach Event, Teesside	Jun. 2022
Volunteer European Astronomical Society Annual Meeting 2021	Jul. 2021
Data Analyst and Website Designer CESSI IISER Kolkata outreach initiative on COVID-19	Jun. 2020 - Jul. 2021
Class Representative Department of Physical Sciences, IISER Kolkata	Aug. 2019 - Jul. 2020