

Name: Naomi Rowe-Gurney

Code: 691

Home institution: Howard University (year 1)
University of Maryland College Park (year 2)

Name of task: Solar System Observations with the James Webb Space Telescope (691.013)

Role in task/ what they do for CRESST: I am funded by JWST Team Solar System and Heidi Hammel's Guaranteed Time Observation (GTO) program. My main job is supporting the people that are doing planetary systems science with the telescope on the GTO program. The teams I am in do everything from atmospheres and surfaces to rings and moons. I also do my own science using JWST and Hubble, to continue my PhD work looking at the atmospheres of Uranus and Neptune in the infrared.



Background/ Autobiography: I did my undergraduate degree, an integrated (4-year) master's in physics with astrophysics at the University of Leicester, UK (2008-2012). I then left academia and moved to Shanghai, China and ended up staying for 5 years. I became a physics teacher there and taught at a Chinese college for 2 years then went back to Leicester for my PhD (2017-2021). My equal love of meteorology and astronomy led me to studying planetary atmospheres on my favorite planets, Uranus and Neptune. I did this using archived mid-infrared data from the Spitzer Space Telescope Infrared Spectrometer. This was in preparation for JWST, and I moved to Maryland in October 2021, just a few months before it was launched.

Throughout my PhD, I used my teaching experience to partake in significant outreach and public engagement work. I also engaged in considerable equality, diversity and inclusion work and was an active member of university committees, as well as promoting science to underrepresented groups. Most of the engagement work I focused on was for the JWST. This experience led me to the role I am in now, where a lot of my job is communicating the solar system science that the telescope does to many different audiences.

I am the PI on an approved Hubble Cycle 30 GO program that is observing the ice giants near-simultaneously with the JWST. I am also PI on a JWST Cycle 2 GTO program mapping the planet Uranus using NIRCam. I have worked on the JWST commissioning team during scattered light and moving target testing. I have also worked with STScI as a subject matter expert on their JWST NIRCam outreach program that observed Neptune.

Highlight of research as a CRESST Scientist: Being directly involved with an innovative and groundbreaking observatory like JWST from before launch until now has been an amazing experience. The projects I have worked on will be remembered forever as the first images and

discoveries that this telescope has made, and I have already seen the Neptune image I helped with up in a museum!

List of awards/grants won:

1. Hubble Space Telescope Cycle 30 GO Program grant recipient (\$33,305) - 2023
2. DPS-NSBP Speaker Award winner (\$10,000) – 2022
3. DPS under-represented minority (URM) travel grant winner (\$2000) - 2022
4. European Research Council PhD Studentship Award (£57,000) - 2017

Three fun facts:

- 1) I moved to the US with my wife and our goldendoodle.
- 2) When we moved here, we bought an old mom-van and use it to go car camping on the weekends.
- 3) I played roller derby for 10 years.

Link to homepage with my full CV and publication links: <https://linktr.ee/nrowegurney>

To learn more about Naomi's work or for collaboration, she can be reached at: naomi.rowegurney@nasa.gov