

I am a graduate student in the Physics and Astronomy department at the University of Nevada, Las Vegas, working under the guidance of my department advisor, Dr. Bing Zhang, and my research advisor, Dr. Paul La Plante. I earned a B.S. in Astrophysics from the University of New Mexico in 2023, where I developed an interest in Cosmology. Currently, I study the early Universe with Dr. La Plante, focusing on the Epoch of Reionization (EoR).

After graduation, I aim to continue researching the early Universe while teaching physics and astronomy. I aspire to engage with underrepresented students in this field, making physics and astronomy as inclusive as possible and diversifying the field for future generations.

My NV NASA Space Grant project will investigate the EoR by studying the 21cm signal of neutral hydrogen in the intergalactic medium. Given the faintness of this signal, cross-correlations may be necessary to confirm the EoR measurements. We are focusing on cross-correlations between the upcoming NASA Roman Space Telescope and the Hydrogen Epoch of Reionization Array with large-scale semi-numeric simulations.