

Jaya Sicard

NV Space Grant Undergraduate Scholarship Biography

Jaya Sicard is a rising senior at the University of Nevada, Reno, where she studies Physics and Engineering Physics with minors in Astronomy and Mathematics. She has been a part of Dr. Thomas White's research lab since January 2023, where her research focuses primarily on warm dense matter. After graduation, she aims to earn her PhD in Physics and eventually work in the laboratory astrophysics field at a national lab or a NASA facility.

Her research project for the 2024 - 2025 school year will be investigating the thermal conductivity of warm dense magnesium oxide (MgO) through Flash simulations. MgO constitutes 25% of Earth's lower mantle in the warm dense state. Analyzing its thermal conductivity properties will allow us to better understand the formation of Earth and other Earth-like planets.