

DEPARTMENT OF PHYSICS AND ASTRONOMY

SPECIAL COLLOQUIUM *IN-PERSON EVENT*



Tracing My Academic Journey to Exploring the Impact of Radiative Layers on Planetary
Atmospheres

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In my presentation, I will recount my academic trajectory, reflecting on pivotal moments and lessons learned, from undergraduate involvement to my current pursuits. My research journey began with immersive experiences in radio astronomy research at the University of Georgia and a summer research project in particle physics at Vanderbilt University. Following the completion of my undergraduate studies at UGA, I transitioned into Environmental Science and Engineering, beginning my Ph.D. at Harvard University. At Harvard, my focus shifted towards theoretical modeling of atmospheric evolution, where I explore the impact of radiative layers on planetary atmospheric profiles, particularly evident in steam atmospheres on highly irradiated planets. By extending these findings to realistic radiative transfer models, I aim to constrain the parameter space wherein magma ocean conditions may exist. This enhances our qualitative understanding of terrestrial volatile partitioning and provides a framework for characterizing magma ocean phases on exoplanets, which allows us to constrain subsequent climate evolution. In my talk, I will share how memorable experiences, influential professors and mentors, and my education at the University of Georgia contributed to my personal and professional development.



Thursday, April 25,

Special colloquium following the Undergraduate Awards Reception at 3:45PM

IN-PERSON EVENT ROOM 202

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