

**BOSTON
UNIVERSITY**

**Boston University College of Arts & Sciences
Institute for Astrophysical Research**

2018 - 2019 ASTROPHYSICS SEMINAR SERIES

Studying Planet Formation Processes with Molecular Spectroscopy

As our understanding of the solar system and exoplanetary systems continues to grow, our view of planet formation processes must expand to accommodate the incredible diversity of formation outcomes. I will focus this talk on my favorite technique for studying planet formation processes in action - molecular spectroscopy. I will review the techniques of molecular spectroscopy and discuss how they can be used to tackle key questions about planet formation, including: Where does water freeze, and does this correspond with giant planet formation? Are there spectroscopic signatures of disk evolution, or the presence of (photo-)planets? What factors determine the final chemical make-up of a planet? I will highlight some of the incredible progress that has been made on answering these questions in recent years, and provide updates on ongoing projects.



Monday, February 11th

3:30 - 4:30 p.m.

725 Commonwealth Avenue | Room 502



Colette Salyk
Vassar College