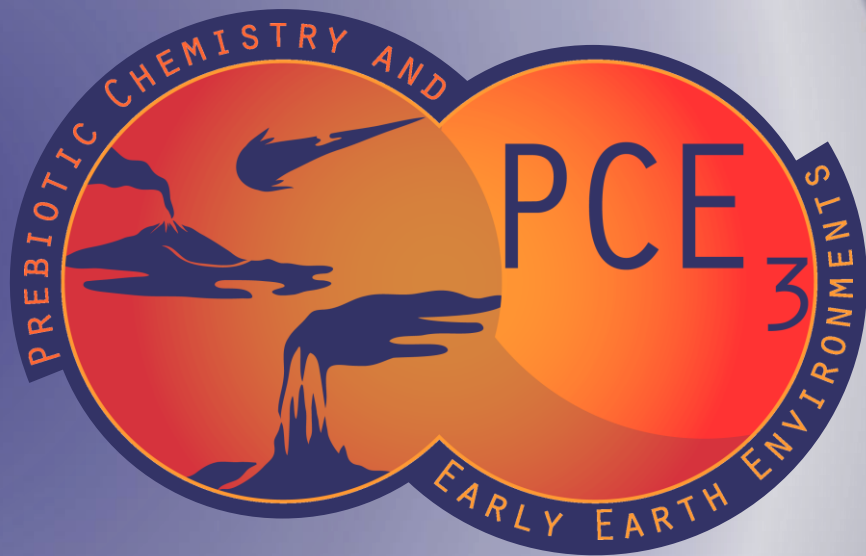


Theme:
Molecule Signatures



PCE₃ Seminar Series

Thurs, Nov. 30th - 5 p.m. EDT

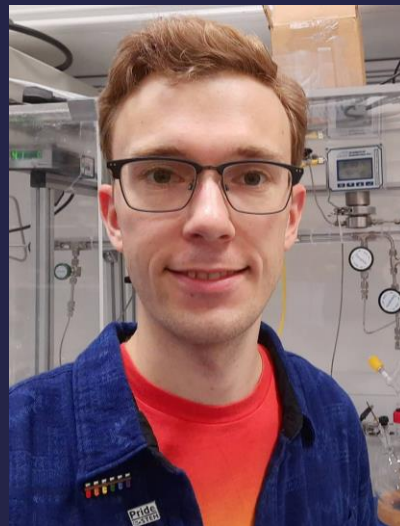
2 p.m. PDT

More information & registration:

prebioticchem.org/seminars



@PCE3_Sci



Patrick Barth

Project Coordinator
*University of Stuttgart, Cluster of
Excellence SimTech, Stuttgart Center
for Simulation Science*

“Follow the Nitrogen - Using isotopes
to trace nitrogen fixation by lightning
on the early Earth”



Bonnie Teece

Postdoctoral Fellow
*NASA's Jet Propulsion Laboratory,
Origins and Habitability Laboratory*

“What remains of organic matter in
deep time”

Patrick Barth

Patrick is currently a project coordinator at the University of Stuttgart, Germany, supporting the Cluster of Excellence for Data-Integrated Simulation Science (SimTech). Until recently, he was a PhD student at the Centre for Exoplanet Science at the University of St Andrews, UK, and the Space Research Institute of the Austrian Academy of Sciences in Graz, Austria. Working with Christiane Helling and Eva Stüeken, Patrick studied the effect of lightning on the atmospheric chemistry of exoplanets and the early Earth. This included Miller-Urey like spark experiments and simulations of chemical processes in planetary atmospheres. Patrick is also passionate about science communication, e.g., giving planetarium shows to children or organizing an exhibition on exoplanet atmospheres.

Bonnie Teece

Bonnie Teece has expertise in organic geochemistry, astrobiology, and science education. She received her PhD in Geology from UNSW Sydney, where she researched organic biosignatures through the geological record. Her research has also focused on spectroscopy and hydrothermal environments. Bonnie believes that contextual knowledge is essential for biosignature research, and spends a lot of her time in the field, in places like the Archean rocks in the Pilbara region, Western Australia, and in Yellowstone National Park, USA. Bonnie's professional experience includes working as a Postdoctoral Fellow at the NASA Jet Propulsion Laboratory, where she is currently developing life detection strategies for the INVADER project in deep ocean hydrothermal vents. Bonnie was the 2023 winner of the Geological Society of Australia's Voisey Medal which is awarded to an early career researcher once every two years for significant contribution to Earth Sciences