

Name: Emeline Fromont (she/her/hers)

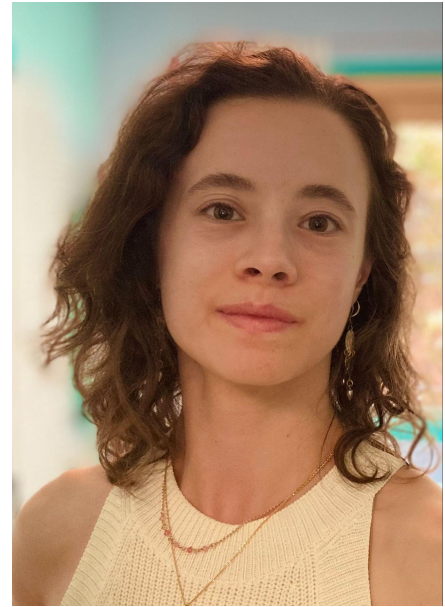
Code: 667

Home institution: UMBC

Name of task: SEEC Work Package (667.008), Faculty Research Assistant

What do you do for CRESST:

As a post-bac researcher at NASA Goddard, I am leading a project to study the atmospheric escape of L98-59, an exoplanet system composed of a small M-dwarf star and four rocky planets, three of which are Earth-like. I am modeling the evolution of water and other volatiles on the inner three planets over billions of years to determine the likelihood of an atmosphere or ocean being present on these planets. This will help us determine whether L98-59's planets are suitable candidates for JWST transmission spectroscopy.



Background/Autobiography:

I'm from France, but my family moved to Maryland when I was a baby and I officially became an American citizen three years ago. I received my bachelor's in physics with a concentration in astrophysics from Carnegie Mellon University in May 2021. I was lucky to be a summer intern at NASA Goddard in 2020, and I absolutely loved the research on exoplanets I did there. I decided to continue my research after graduation through a post-bac at Goddard, which I started in August 2021. Even though these all happened during the pandemic, I am so grateful for these wonderful experiences, which allowed me to meet so many cool scientists and be part of the wholesome environment at Goddard. I will be starting a PhD in Astronomy at University of Maryland this fall (2022), in which I plan to continue research on exoplanets and planetary systems.

Favorite part of being a CRESST Scientist:

I love all the collaborations with research institutions made available through CRESST, and being able to meet so many amazing experts in different fields.

Highlight of research as a CRESST Scientist: I am currently writing my first paper!

List of publications:

Ahlers, J. P., Fromont, E. F., Kopparappu, R., Cauley, P. W., & Haqq-Misra, J. 2022, ApJ, 928, 35, doi: 10.3847/1538-4357/ac5596