

## A Door to Mars

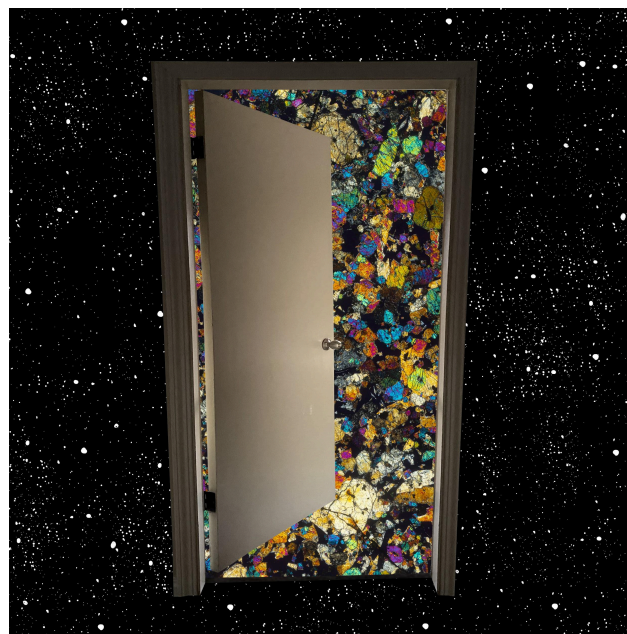
### Semi-finalist

Sophie Benaroya

Earth and Atmospheric Sciences

Doctorate program

Image location: The image inside the door was taken at the University of Alberta in the Department of Earth and Atmospheric Science's Digital Imaging Facility. The door is one of the doors in my apartment in Edmonton.



## Image Description

Inside this door is a piece of another world. Rocks are all around us here on Earth, and usually, they seem pretty unassuming, just dark grey blocks. But if you slice them thinner than a hair and peek at them under a microscope their rainbow-colored minerals can tell you the story of how they formed. The minerals in this rock started forming deep inside Mars, at temperatures over 1000°C, and slowly rose toward the surface of the planet, likely millions of years ago. It was stuck inside Mars until it got hit by an impactor big enough to re-melt some of the minerals and turn them into glass (that's all the black spaces in the door) and launch it up into space. It then had to travel over 200 million kilometers through space before hitting the desert in Morocco and eventually being found in 2017.

This tiny slice is one of the samples I use to piece together the history and chemistry of Mars. It is my door to Mars.

## Image Creation

I took the photo of the rock using a Nikon Coolscan slide scanner, and the photo of the door using an iPhone. I then used Adobe Illustrator to clip out the background of the door and fill the inside with the rock image. I then made the space/galaxy background also using Adobe Illustrator with the Paintbrush tool.