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## Finding molecules in Space

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## **Inspiring minds**

We have gazed up into the night sky for thousands of years in order to comprehend our Universe. That's how most of Astronomy happens. But there are only a few problems that lasts 100 years. One of those are Diffuse Interstellar Bands. In 1919, while studying stars, we found some pattern of light that didn't match any known molecule. These came from matter between us and the stars - the interstellar medium. The challenge is complicated by the fact that there are 1.2 million possible molecules that may be producing them, plus, the difficulty of recreating a space environment in a lab to record spectrum of potential molecules. So, you may be thinking, why can't we run a computational simulation that simulates the spectrum of potential molecules and determine which one best matches our observation? Yes we can, and that's my research. Our best bet are carbonaceous molecules.

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