

# Compelling Conversations — Exploring the Fundamental Questions of the Universe

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UCI Physical Sciences Communications



## Compelling Conversations

Anchoring in the Unknown: Exploring  
the Fundamental Questions of the Universe

What is dark matter? It's a question as alluring as it is perplexing. Just ask Rebecca Riley — or any of the participants in this new Compelling Conversations episode — who recounts what it's like to ponder the existence of something that physics know makes up most of the mass of the Universe, but which nobody's ever detected before, and how it can be hard to talk about it in a way that makes sense. "This is a really, kind of mind-numbing exercise when you really try to start thinking about all the possibilities," Riley said in the conversation. "Regularly, when I go home, I have spend about an hour with my dad on the couch, and he's trying to grasp dark matter, and he's like 'Wait! Is it here, in this room?' And I say it moves wherever it wants, it's almost like this ghost — it can move right through you." To talk about

what dark matter is, along with other enduring questions that possess the minds of those who study the Cosmos, the dean of Physical Sciences, James Bullock, sat down for a Zoom call with Riley, as well as professors Paul Robertson, who studies distant exoplanets, and Kev Abazajian, who studies dark matter, of the UCI Department of Physics & Astronomy.

Podcast:

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