

# THE DARK SIDE OF THE UNIVERSE

BY KATHERINE FREESE

The atoms that make up the known universe constitute only 5% of all matter and energy in the cosmos. What remains is a recipe of 25% dark matter and 70% dark energy: nonluminous components whose nature remains a mystery.

Join Dr. Katherine Freese, author of *The Cosmic Cocktail: Three Parts Dark Matter*, and Professor of Physics at the University of Texas, Austin—as she recounts the hunt for dark matter, from the discoveries of scientists such as Fritz Zwicky and Vera Rubin, who identified the first pieces of evidence for dark matter, to the deluge of data today from satellites, underground laboratories, and the Large Hadron Collider.



Dr. Katherine Freese

**JULY 22, 2019**

Doors open at 6:45PM  
Lecture begins at 7:30PM  
Q&A to follow

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*Presented by the Tri-institute  
Summer School on Elementary  
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