

UWSP PHYSICS & ASTRONOMY COLLOQUIUM

Friday, November 18, 2016 at 2:00 p.m. in A-107 SCI

Refreshments will be served beginning at 1:45 p.m.

The Search for Dark Matter

Bethany Reilly

UW-Fox Valley



Only about 5% of the Universe is made up of regular matter and energy. About 25% is made of “dark matter.” (The rest is “dark energy.”) This talk will go over early dark matter discoveries and rationales, as well as cover current theory (including SUSY), and modern experimental methods and results. The heated debate and discord among the dark matter direct detection community over whether dark matter has been detected or not will be discussed. A look at the sodium iodide detector DM-Ice will conclude the talk.

Bethany Reilly was born near UW-Milwaukee, and grew up in the suburbs of Milwaukee reading about horses, playing with her dog, and playing soccer. She was homeschooled K-12, and spent her freshman year of college at UW-Waukesha. Transferring to Taylor University in Indiana, she graduated three years later with a BA in physics and a math minor. Returning to her home state, she attended graduate school at UW-Madison, where she earned her MS and PhD in the field of experimental astrophysics doing direct detection dark matter research under Dr. Reina Maruyama (now at Yale University) on the DM-Ice experiment. She currently teaches physics and astronomy at UW-Fox Valley.

