KAPPA MU EPSILON- MATH CLUB

## Guest Speaker: DR. OLIVIA WALCH

Monday, March 18th at 6 in Pearce 135

Dr. Olivia Walch is a postdoc from the University of Michigan. Her research pairs mathematics with things like sleep cycles, art, and even gerrymandering. At this KME event, she will discuss **MATH**, **SLEEP**, **AND OUR PHONES**.

She states in her abstract, "Mobile devices let us connect theoretical models of human sleep physiology to real-time data collected from sleeping people. In this talk, I'll discuss the mathematics of sleep and circadian rhythms, the state of the art in sleep detection via wearables, and how math models can be combined with machine learning to improve our ability to predict a person's sleep stages. I'll also talk about open-source apps I've made which deploy physiological models in the wild."

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