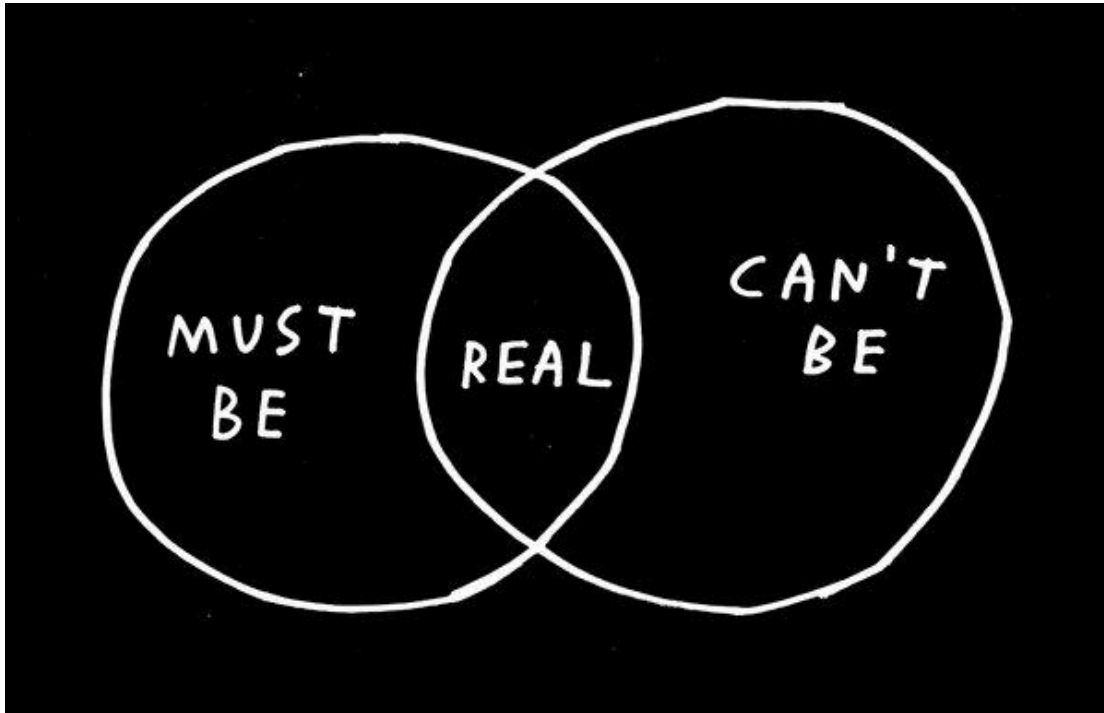


Society of Physics Students Spring Seminar
Series (SPSSSS)

PROFESSOR ARIEL SOMMER

“Big Ideas in Quantum Mechanics”



The microscopic realm of atoms and electrons brings out aspects of physics that defy the classical laws of nature. Particles behave like waves, angular momentum takes on only discrete values, and some measurements give unavoidably random results. Quantum mechanics explains these phenomena by replacing the deterministic laws of classical physics with probabilistic laws, formulated in terms of probability amplitudes that can add and interfere. Quantum mechanics provides an accurate description of the structure of atoms, molecules, and solids, and still presents mysteries today.

Ariel Sommer is an Assistant Professor of Physics at Lehigh University. After receiving his Ph.D. in physics at MIT, he was a Grainger Postdoctoral Fellow at the University of Chicago and a Postdoctoral Associate at MIT. His research investigates the properties of strongly interacting quantum systems through experiments on atomic gases near absolute zero temperature.

**LL316 4:10 Tuesday, February
19th**

Refreshments will be served*