

Anja Bleszynski Jayich Director, Quantum Foundry, an NSF QAMASE-I center, UC Santa Barbara

UC Santa Barbara

Title of the lecture:

Spin coupled mechanical system

Format:

TBA

Contents

This course will discuss the fundamentals of coupling of spins to mechanical degrees of freedom and motivate the desire to reach the quantum regime of coupling. I will discuss different realizations of spin-coupled mechanical devices, the various phenomena that can arise in the quantum regime, and the requirements for observing "quantumness" in the interaction spin-mechanical interaction. Several modern-day examples will be discussed as well.