

Department of Physics and Department of Environmental &
Interdisciplinary Sciences Joint Seminar

Measurements of lipid membrane interactions

Who:

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Where:

Science Building, room 146

When:

Oct 21, 2015 4:00 pm – 5:00 pm

Abstract:

Lipids are molecules found in biological cells. When immersed in water, lipids spontaneously aggregate to form flexible membranes with thicknesses on the order of 5 nm. These membranes are practically impermeable to ions but can host specialized protein molecules that act as ion channels. I will present measurements of interactions at two different length scales: at short molecular length scales lipid interactions determine the function of ion channels while at larger supramolecular length scales on the order of nanometers, lipid interactions determine the formation of membrane multilayers such as those surrounding the axons of neurons.