
Presents:

Professor Wylie Ahmed
Physics



Title:

The forces that keep our cells alive

Abstract:

Living cells actively generate forces at the molecular scale that change their overall structure and mechanical properties. This nonequilibrium activity is essential for cellular function, and drives processes such as division, migration, and organization. In the first part of this talk, I will introduce how cells throughout the body (e.g. muscle, heart, tissue, and brain) must act as active mechanical systems to keep us alive. In the second part, I will discuss recent advances that allow quantification of nonequilibrium activity in living cells and insight on the molecular-scale driving forces. Our approach leverages a close synergy between experiment, theory, and simulation to explore the basic physical principles driving biological processes and to inspire new advances in soft and active matter physics.

When: Friday April 21, 2017 3p.m.

Where: MH-480

Light Refreshment will be served.

For information regarding seminars and workshops email: ccam@fullerton.edu