

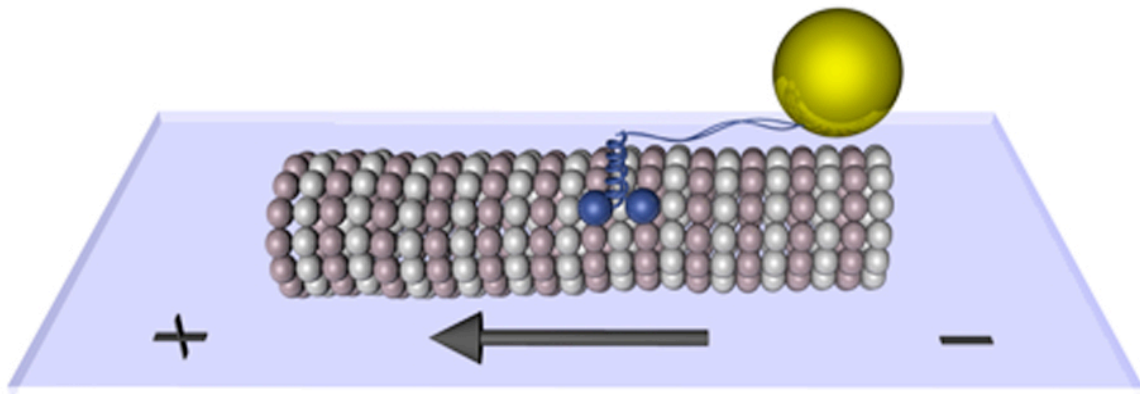
# Physics Department Seminar

Friday March 12, 2010

11:00am in PhSc 108

## “Walk Like a Molecule: How Kinesin Transports Vesicles”

Mr. Preston Countryman  
Senior Physics Major, CSUC



### Abstract:

Thermal fluctuations and enzymatic catalysis are central features in microbiological systems. Molecular motors use both in their transformation of chemical free energy into mechanical movement. This talk will focus on the behavior of kinesin, a single-molecule motor, as observed in experiments in which the velocity of single kinesin is measured as function of load force. Interpreting these results involves a rich combination of probabilistic physics and chemical kinetics.