



The Department of Physics at the University of Cyprus  
is organizing a seminar on

**Wednesday, 22 of February 2017, time 2:00 p.m.**

Room B228, Building 13, New Campus

Speaker:

**Dr. Doran I. G. Bennett**

Harvard University, Department of Chemistry

CIFAR Postdoctoral Fellow

Bio-inspired Light Harvesting Program

**“Multiscale principles of photosynthetic light harvesting”**

Photosynthetic light harvesting, the conversion of photons into chemical energy, is the origin of food and atmospheric oxygen on earth. Understanding the design principles underpinning photosynthetic efficiency from the protein to the cellular length scale offers the potential of rationally engineering photosynthetic organisms for increased yield. In this first part of my talk, I will address how the vibrational environment of a pigment bound in a protein scaffold can control pathways of excitation energy transfer (EET). In the second portion of my talk, I will extend the mechanistic model outlined in part one to describe EET in Photosystem II (PSII), a large photosynthetic aggregate containing ~40,000 chlorophyll. The simulation of light harvesting in PSII will be used to determine the mechanistic origin photosynthetic efficiency in dim light conditions.

For more information please contact:  
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