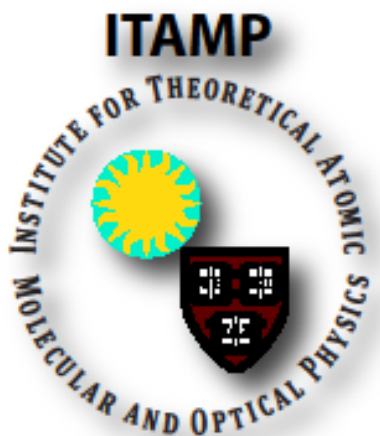


SPECIAL JOINT QUANTUM SCIENCES SEMINAR



Prof. Martin Plenio

Institute of Theoretical Physics, Ulm University

Monday, June 17, 4:00pm

Pfizer Auditorium | 12 Oxford Street | Mallinckrodt B23

Light Refreshments at 3:45pm

“Controlling Resonances for Quantum Sensing and Biology”

In recent years the exploration of the relevance of quantum dynamics for biological functions has experienced a considerable increase in interest thanks to both new theoretical ideas and improved experimental techniques. The surprising longevity of coherent phenomena in warm, wet and noisy biological environments is partially due to an intricate interplay between electronic quantum dynamics and the thermally activated vibrational environment made up of molecules and proteins. I will present background, questions and an exploration of the fundamentally important interactions of quantum system and environment. I will show how the three key examples of quantum biology - photosynthesis, magnetoreception of birds and olfaction - fit into this framework thus underlining its importance.

Quantum Sciences Seminars (in Chemistry) are jointly sponsored with Harvard Department of Chemistry and Chemical Biology and the Harvard-Smithsonian Center for Astrophysics. ITAMP sponsors talks and presentations on forefront AMO/Condensed Matter Physics from notable Scientists, Researchers and Professors. Information about speakers and ongoing dates can be found on the ITAMP Google Calendar. Go to: <http://www.cfa.harvard.edu/itamp/gcalendar.html> If you would like to be added to our e-mail list about our events please send the request to the ITAMP Coordinator at: itamp.si.hu@gmail.com.

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