

19th June 2013 - 2:00 p.m. CFEL-bldg. 99, seminar room I

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Excitation energy transfer in light harvesting systems

In photosynthetic organisms the energy of the absorbed light is transported via resonant electronic excitation transfer along assemblies of (bacterio) chlorophyll molecules. In this talk I discuss the basic mechanism underlying this energy transfer. I will first introduce a fully quantum mechanical approach, focusing on the appearance of quantum coherences between the chlorophylls and their decoherence caused by the environment. Finally I will discuss in how far these coherences can be reproduced in a purely classical description.



