

Physikalisches Kolloquium

Thursday, 17.10.13, 17:15, HS 100
Reception with coffee & cookies 16:45

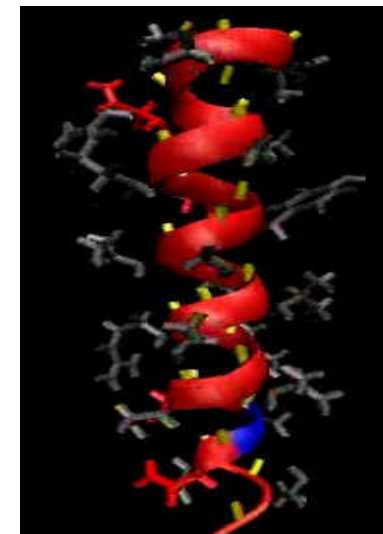


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Quantum Vibrational Excited States and Protein Function

Abstract

Proteins are the machines of life, they drive essentially all the physical and chemical processes that go on in living cells: they catalyze reactions, pass signals and provide basic structure. In many cases, a protein's work involves a conformational change. Here it is proposed that the first step in protein function is the creation of a quantum vibrational excited state in the protein (the VES hypothesis). Applications of the VES hypothesis to biological processes such as energy transfer in proteins and protein misfolding will be presented.



All of you interested in physics are cordially invited!