Quantum Effects in Biology

Quantum mechanics provides the most accurate microscopic description of the world around us, yet the interface between quantum mechanics and biology is only now being explored. This book uses a combination of experiment and theory to examine areas of biology believed to be strongly influenced by manifestly quantum phenomena.

Covering subjects ranging from coherent energy transfer in photosynthetic light-harvesting to spin coherence in the avian compass and the problem of molecular recognition in olfaction, the book is ideal for advanced undergraduate and graduate students in physics, biology, and chemistry seeking to understand the applications of quantum mechanics to biology.

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