

Physics Colloquium

Michigan Technological University

March 16 (Thursday) 2006, 4:05 to 4:55 pm
Room 139, Fisher Hall

Theoretical Concepts in Biophysics

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Abstract

Problems encountered in the theoretical description of biological systems cover several orders of magnitude, and range from the molecular level up to the level of the organism. Nevertheless, certain theoretical concepts can successfully be applied equally well at many levels. In particular, examples are given for the stochastic description of cardiovascular flow, molecular transport and the simulation of biopolymers.

Biography

Walter Nadler received his PhD from the Technical University Munich in 1985. He subsequently worked as a postdoc in the groups of Klaus Schulten (TU Munich) and Rudolph A. Marcus (CalTech), and as a research scientist in the Department of Theoretical Chemistry at the University of Tuebingen and in the John von Neumann Institute for Computing at the Research Center Juelich. In 2005 he joined Prof. Hansmann's Computational Nano- and Biophysics Group at MTU.