SCMS Seminar



NONEQUILIBRIUM PHYSICS IN BIOLOGY

Prof. Jin Wang Stony Brook University

Time: 10:00-11:00, Monday, 14th August, 2017

Venue: Room 2201, Guanghua Eastern Main Building, Handan Campus

Abstract: We give a review of the recent progress of Nonequilibrium physics and in particular the landscape-flux approach. We established the conceptual framework and physical quantification to various important biological systems such as cell cycle, differentiation and development, evolution and ecology.

 $k_3 = hf(x_{i-1} + \frac{h}{2}, y_{i-1} + \frac{k_2^{(i-1)}}{2})$

Short Biography: Dr. Wang is a Professor of Chemistry and Physics at Stony Brook University. He is also affiliated with Laufer Center for Physical and Quantitative Biology at Stony Brook University. He is a fellow of APS and AAAS. Dr. Wang studies the physics and chemistry of biomolecules and networks with a focus on the mechanisms of protein folding, biomolecular recognition and biological networks. He uses modern statistical mechanics, simulations, and empirical information from databases to study the detailed processes involved. He has published over 200 papers, many of them are published in some high impact journals, such as Nature Structural & Molecular Biology, PNAS, JACS, and PRL.