Area Seminar

Title	Simple models for structure, folding, and aggregation of proteins
Date and Time	30/07/2014 11:00:00
Speaker	Prof. Chin-Kun Hu, Academia Sinica, Taiwan
Area	Theoretical Physics
Venue	Room No. 469
Abstract	The objective of statistical physics is to understand macroscopic behavior of a many-body system from the interactions of the constituents of that system. In the development of science, simple models have often been used to describe complex systems consisting of many components, e.g. the critical behavior of gas-liquid systems can be well described by the three dimensional Ising model and the Lennard-Jones system. In this talk, I briefly review some results from simple models for structures, folding, and aggregation of proteins. The last problem is related to neurodegenerative diseases. It is pointed out that in many cases, protein aggregation does not result from protein mis-folding. A potential drug from Chinese herb is found for Alzheimer's disease.