

Lectures on Disordered Systems

Prof. Rudolf A. Roemer

University of Warwick, Coventry, UK

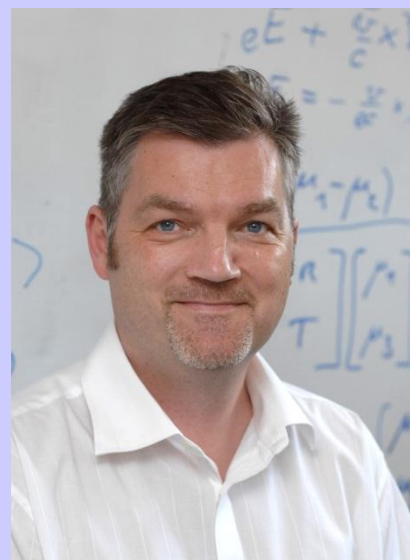
2015年4月10, 13, 15, 17, 20日

下午3: 00-4: 45

频标楼4楼报告厅

Teacher:

Rudolf A. Roemer, Professor of University of Warwick, UK, hold a joint position between the Department of Physics and the Centre for Scientific Computing, and is the head of research group Disordered Quantum Systems. He published more than 150 papers. Else he got the Fellow (FInstP) of The Institute of Physics in 2011 and Heisenberg fellow of the German science foundation in 2002. Current Research Interests: Solid state physics, computational physics, disordered materials, quantum Hall effect, transport problems in quantum systems, meso- and nanoscopic physics, exact solutions, mathematical physics, biological physics, various.



Contents:

- 1st lecture: Sparse matrix diagonalization, what it is, why and when it works
- 2nd lecture: Localisation and finite-size effects in graphene flakes studied with the transfer-matrix method
- 3rd lecture: Multifractal scaling and universality of the 3D Anderson transition
- 4th lecture: Self-assembling tensor networks and holography in disordered spin chains
- 5th lecture: Dynamics and flexibility of protein disulphideisomerase (PDI) and other large proteins

主办单位:武汉物数所理论与交叉研究部