



# 北京大学量子材料科学中心

## International Center for Quantum Materials, PKU

### Weekly Seminar

Jianlan Wu

*Physics Department, Zhejiang University*

**Time: 4:00pm, 27 May, 2015 (Wednesday)**

**时间: 2015年05月27日 (周三) 下午4:00**

**Venue: Room W563, Physics Building, Peking University**

**地点: 北京大学物理楼 西563**

#### Abstract

The energy transfer process in the early step of photosynthesis is highly efficient. 1) Under quantum dynamic framework, we determine the optimal energy transfer induced by environmental fluctuations. The trapping-free subspace is proposed for the noise-enhanced energy transfer. 2) The high-order corrections in the quantum kinetic expansion (QKE) provide a detailed exploration of non-trivial quantum effects (multi-site coherence) revealed by flux analysis. 3) The cluster-based generalized QKE (GQKE) method is developed to study multi-scale quantum dynamics of the energy transfer.

#### About the Speaker

, 1999  
MIT

2010

2004

MIT