## "凝聚态物理-北京大学论坛" 2008年第17期

时间: 2008年10月23日(星期四)下午15:00-16:30

地 点: 北京大学物理大楼中 212 教室

Epitaxy for Device Applications:

Research Activities in Semiconductor Materials Research

报告题目:

报告摘要:

Laboratory at UCLA

Epitaxy is a powerful technique for producing intricate semiconductor device structures for various applications. I will present our group's research on the fabrication of high mobility 2-dimensional electron systems for understanding correlated electron behaviors, the fabrication of self-assembled nano-clusters of Ge and InAs on Si for optoelectronic device applications, and the fabrication of pn-junctions with ultra-abrupt dopant profile with minimum broadening due to diffusion for MOSFET applications.

A brief introduction of other research topics of our group will be given at the beginning.

报告人: Prof. Xie Ya-Hong (UCLA, alum of the School of Physics, PKU)

Ya-Hong Xie obtained his BSc in Physics from Purdue University in 1981, and his MSc and PhD in Electrical Engineering from the University of California at Los Angeles in 1983 and 1986, respectively. He joined the Physical Sciences and Engineering Research Division of Bell Laboratories, Lucent technologies in 1986 where he remained until joining the faculty of UCLA in 1999 as a professor in the department of Materials Science and Engineering.

His research has been centered in epitaxial growth of semiconductor heterostructures and more recently the epitaxial growths of graphene.

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