

www.qiji.cn/scinews

<u>预印本 | 图书 | 社区 | 相册 | 登录 | 2005年8月20</u>周六

搜索!

关键词:

<u>首页 | 科学前线 | 读书新知 | 开放获取 | 英语新闻 | 学界人物 | 奇迹动态 | 往日报道</u>

<u>科学报道:英语新闻</u>: Dirac Medal goes to condensed matter physicists

Dirac Medal goes to condensed matter physicists

新闻ID:SciNews-20 更新日期: 2005年8月09 周二 PhysicsWeb

Sam Edwards of Cambridge University and Patrick Lee of the Massachusetts Institute of Technology (MIT) have been awarded this year's Dirac Medal by the Abdus Salam International Centre for Theoretical Physics. Edwards wins the prize for "his fundamental contributions to polymer physics, spin glass theory and the physics of granular matter", while Lee is recognized for "his pioneering contributions to our understanding of disordered and strongly interacting many-body systems".

Edwards' work in condensed matter physics began in 1958 when he showed that disordered systems like glasses and gels could be described by quantum field theory, and he revolutionised polymer physics in the 1960s with the introduction of the Edwards Hamiltonian and, later, the concept of polymer entanglement. The replica formalism, which provided the first solution to the "spin glass" problem in magnetism, followed in the 1970s. Edwards, who was knighted in 1975, is presently emeritus Cavendish professor of physics at Cambridge University.

Lee's research has focussed on strongly correlated electronic systems -- materials where the interactions between electrons play a crucial role and lead to novel phenomena that cannot be explained by the established Fermi-Landau liquid theory. One of Lee's major contributions in this area was the introduction of the concept of universal conductance fluctuations to describe mesoscopic devices. Lee, who is William and Emma Rogers professor of physics at MIT, is currently studying hightemperature superconductors.

The Dirac Medal is awarded to scientists who have made significant contributions to theoretical physics and mathematics. It is always awarded each year on Paul Dirac's birthday -- August 8 -- and is worth 5000.

Google: <u>更多Dirac Medal信息</u>

■加入收藏: ◎ 收藏此页 <u>关于ViVi</u> <u>短信好友</u> Ads by Goooooogle

Physics & Consciousness Quantum physics and the human mind Podcast & mp3 by Dr. John Hagelin. mum.edu/podcast

<u>Polymer</u>

Characterization Weight, Size, IV, Structure & More! GPC/SEC Technology. Learn More www.viscotek.com

Slide Shows for Physics

MathType for science and math presentations free download! www.dessci.com

Polymer

characterization Separate and Characterize Particles Combined AFFF and MALS. www.wyatt.com