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TIME: Wednesday, 3:00 PM, Mar. 28, 2012 **LOCATION: A601 NAOC**

Recent Advancements in Planetary Astrophysics

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Dr. Doug Lin is a Professor of Astronomy and Astrophysics at the University of California, Santa Cruz, and is the founding Director of the Kavli Institute of Astronomy and Astrophysics at Peking University. He earned his B.S. from McGill University and his Ph.D. in astronomy and astrophysics from Cambridge University. He joined the UCSC faculty in 1979. Lin is renowned for his research in astrophysics, which has focused on understanding the formation and evolution of stars and planets. He has made significant contributions to the physics of disks of matter orbiting around a central mass, such as Saturn's rings, spiral galaxy disks, and the accretion rings around black holes that power quasars.

Abstract

Planetary astrophysics is the most exciting and fastest growing branch of astronomy today. New data obtained from systematic radial velocity surveys and Kepler transit surveys have led to the discovery of over 700 planets and 3000 additional highly probably candidates, many of which are multiple systems. Based on these data, I will present theoretical analysis which enables us to extract information about their origin, evolution, and structure. I will discuss the importance of planet migration, the interaction of stellar magnetic fields with protostellar disks and planets, tidal evolution of close-in companions, the potential retention of volatile elements and loss of atmosphere.



All are welcome! Tea, coffee, biscuits will be served at 2:45 P.M.

You are welcome to nominate speakers to Shude Mao (shude.mao@gmail.com), Licai Deng (licai@bao.ac.cn), Xuelei Chen (xuelei@cosmology.bao.ac.cn).