

国台学术报告 NAOC COLLOQUIUM

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TIME: Wednesday, 3:00 PM, July 11, 2012 **LOCATION: A601 NAOC**

Science Preparation for FAST



Prof. Di Li (Chief Scientist of Radio Division, NAOC)

Di Li (李菡) is a Professor of Astronomy at NAOC, and the Chief Scientist of Radio Division. He obtained Ph.D. in Astrophysics at Cornell University in 2002 and joined Harvard-Smithsonian Center for Astrophysics in 2002. From 2005 to 2006, he was a Research Associate at Jet Propulsion Laboratory/California Institute of Technology. He was a Research Scientist at California Institute of Technology from 2007 to 2011. He has lead many research programs, including spectroscopic and mapping projects on Arecibo, FCRAO, SWAS, Spitzer, Herschel, and SOFIA. He has pioneered several observing and data analysis techniques, including HI narrow self-absorption technique and a new inversion solution to the dust temperature distribution. These techniques lead to important measurements of star forming regions, such as the formation time scale. He is the key member of the team who first discovered molecular oxygen in space and then confirmed it with Herschel. His works have been highlighted on Nature magazine as one of the Astronomy highlights of 2010 and have been cited by numerous review articles.

Abstract

The raw sensitivity of radio telescopes roughly follows a "Moore's law" since the start of modern radio astronomy in 1940s. The construction of the Chinese "mega-science" project, Five-hundred-meter Aperture Spherical radio Telescope (FAST), which is to be commissioned in Sep. of 2016, is the next major step in this rapid progression. This talk will introduce our fundamental science program (973) supported by the Ministry of Science and Technology to develop key areas and radio capabilities for the Chinese radio astronomy community in anticipation of FAST. In particular, I will focus on a series of projects being started or planned in the last few months. We hope to foster collaboration within the NAOC science community, who will play crucial roles in defining the key programs for FAST observation, especially in its early phases.



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).