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TIME: Thursday, 10:00 AM, Jan. 10, 2013 **LOCATION: A601 NAOC**

Neutrinos and the Origin of the Elements

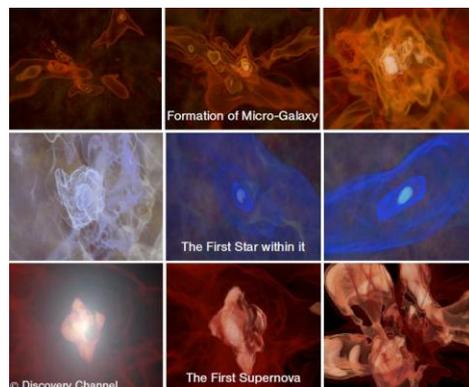


Dr. Yongzhong Qian (Univ. Minnesota)

Dr. Yongzhong Qian is a professor at the School of Physics and Astronomy, University of Minnesota. He got his PhD of Physics from University of California in 1993. He went on to the National Institute for Nuclear Theory at UW Seattle as a Research Associate from 1993 to 1995. Then He was a David W. Morrisroe Fellow in Theoretical Physics at Caltech from 1995 to 1998. In 1998, Los Alamos National Laboratory offered him a J. Robert Oppenheimer Fellowship and UM Minneapolis offered him an Assistant Professor position. He spent 1998 to 1999 at Los Alamos and joined UM in 1999. His main research areas are nuclear/particle astrophysics and cosmology: neutrino oscillations and their effects in astrophysical environments, supernova explosion and nucleosynthesis, chemical evolution of galaxies.

Abstract

Neutrinos are important in driving the expansion of the universe shortly after the big bang and play dynamic roles in supernovae. They also determine the conditions for nucleosynthesis in these two environments. Consequently, big bang and supernova nucleosynthesis is a sensitive probe of the fundamental properties of neutrinos, such as the number of neutrino flavors and the parameters of neutrino oscillations. This talk focuses on the supernova nucleosynthesis probe in view of the recent major advances in experimental studies of neutrino oscillations and in astrophysical observations of elemental abundances. The strong interplay among nuclear, particle physics and astrophysics is emphasized.



All are welcome! Tea, coffee, biscuits will be served at 9:45 A.M.

You are welcome to nominate speakers to Weimin Yuan (wmy@nao.cas.cn, Jan-Mar), Mei Zhang (zhangmei@bao.ac.cn, Apr-Jun), Licai Deng (licai@bao.ac.cn, Jul -Sep), Xuelei Chen (xuelei@cosmology.bao.ac.cn, Oct -Dec).