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TIME: Thursday, 2:30 PM, May 16, 2013 **LOCATION: A601 NAOC**

Excess Lithium in K giants: A Puzzle to Stellar Models

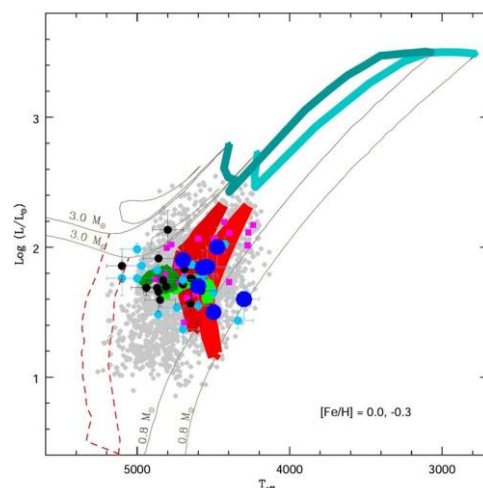
Prof. Bacham Eswar Reddy (Indian Institute of Astrophysics)



Dr. Bacham Eswar Reddy is a member of the faculty at the Indian Institute of Astrophysics, Bangalore, India since 2003. He got his PhD degree from Indian Institute of Astrophysics in 1997. He has been Research Fellow at Valparaiso University from 1997 to 1999 and at University of Texas from 1999 to 2003. As India TMT program director he is actively involved in India's participation in the TMT project since 2010. His main area of research is stellar population studies based on abundances from high resolution spectroscopy.

Abstract

In this talk, I describe our recent survey of search for Lithium-rich K giants among a controlled sample of 2000 K giants with accurate parallaxes. The Survey resulted in finding of 14 new Li-rich K giants including four new super Li-rich K giants doubling the known Li-rich K giants in the solar neighborhood. I will discuss the possible scenarios for its origin, and its connection with infrared excess which itself is rare among RGB stars.



< Figure 1 > Li-rich K giants in HR diagram. Note the occurrence of Li-rich giants at a specific phase (RGB bump) of stellar evolution.

All are welcome! Tea, coffee, biscuits will be served at 2:15 P.M.

You are welcome to nominate speakers to Weimin Yuan (wmy@nao.cas.cn), Mei Zhang (zhangmei@bao.ac.cn), Licai Deng (licai@bao.ac.cn), Xuelei Chen (xuelei@cosmology.bao.ac.cn), Shude Mao (smao@nao.cas.cn)