



Università degli Studi di Perugia  
DIPARTIMENTO DI FISICA  
Dottorato di Ricerca in Fisica  
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## **AVVISO DI SEMINARIO**

**Martedì 24 Febbraio 2009**  
**ore 11:00**  
**Sala Riunioni**

*Observations of Li in post-giant branch stellar evolution. Evidence for non-standard mixing*

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### **Abstract:**

*The origins of Li isotopes are still under debate. Standard Big-Bang nucleosynthesis and spallation by cosmic rays in the interstellar medium seem to account up to  $\sim 50\%$  of the observed Li. Low and intermediate mass stars on the AGB phase are still the only observational evidence of Li production in stars, may be accounting for the remaining 50% of the total Li inventory. Although standard stellar models of intermediate mass AGB stars qualitatively account for the observed properties of the Li-rich stars, there is observational evidence indicating that Li is produced also in low-mass ( $< 3 M_{\odot}$ ) post-RGB and AGB stars. This Li production cannot be account for by current models of stellar evolution, suggesting the existence of non-standard mixing/burning mechanisms. We will study an example of this problem with the star Draco 461 and show that, to reproduce its chemical properties, such non-standard mixing is required. However, the physical reason triggering this new mixing mechanism is not yet known.*

Tutti gli interessati sono cordialmente invitati a partecipare.

**IL COORDINATORE**  
*Prof. Maurizio Busso*