



## Avviso di Seminario

29-11-2019, Ore 12:00 - SALA RIUNIONI TERZO PIANO

**Karl-ludwig Kratz**

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### **NUCLEOSYNTHESIS OF LIGHT TRANS-FE ISOTOPES IN CCSNE: IMPLICATIONS FROM PRESOLAR SiC-X GRAINS**

*This talk presents an  $r$ -process parameter study within the high-entropy-wind (HEW) scenario of core-collapse supernovae (ccSNe). One of the primary aims of this study was to obtain indications for the production of classical  $p$ -,  $s$ - and  $r$ -isotopes of the light trans-Fe elements in the Solar System (S.S.). Here, we focus on the nucleosynthesis origin of the anomalous isotopic compositions of Zr, Mo and Ru in presolar SiC X-grains (SNe grains). In contrast to the interpretation of other groups, we show that these grains do not represent the signatures of a 'clean' stellar scenario, but rather, are mixtures of an exotic nucleosynthesis component and S.S. material.*

Il Direttore  
**Patrizia Cenci**