

The 13th Torino Workshop on AGB stars & the 3rd Perugia Workshop on Nuclear Astrophysics



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Unstable Isotopes of s-Process Origin: from very short-life to very long-life

The s-process path involves unstable isotopes for each element.

After the discovery of live Tc-99 in the Red Giant RCor Bor star by Paul

Merrill in 1952, several have been found alive in meteorites, or through their extinct daughters trapped in microscopic Silicon Carbide grains.

We will dwell on the short-live Ca-41, Nb-92, Pd-107, Hf-182.

Then we will the origin of the stable isotope In-115 and on the s-only pair Lu176/Hf176, with Lu176 thermometer of the main s-process in AGB Stars, not a chronometer as believed before. Nuclear spectroscopy analysis by Franz Kaeppeler has been crucial.

Session

Stellar nucleosynthesis

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