



EINLADUNG
zum
VERA - SEMINAR
von

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**Cosmic Radioactivity and Astronomy with
Gamma-Ray Telescopes**

Fusion reactions in stars and in supernova-explosions are responsible for the great variety of chemical elements in our universe. In these processes admixtures of unstable nuclei are produced as well. Their decay in the interstellar medium leads to the emission of characteristic lines with energies typical for gamma-ray emission. In this way, space born telescopes are able to observe cosmic nucleosynthesis. Since 2002 the ESA mission INTEGRAL provides data from different regions in our Milky Way. In particular, long-lived radionuclides, e.g. ^{44}Ti , ^{26}Al and ^{60}Fe have been detected, and annihilation radiation originating from interstellar positrons. In this talk I will highlight the measurement techniques and the astrophysical processes and conditions. Recent observations and open questions will be discussed.

Donnerstag, 24. Juni 2010, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess-Hörsaal**