^{47}Fe

^{47}Fe was discovered by Borrel et al. at Grand Accelerateur National D'ions Lourds (GANIL) in France in 1992, as reported in the paper "The decay modes of proton drip-line nuclei with A between 42 and 47" (1992Bo37). A 69 A·MeV ^{58}Ni beam was incident on a natural nickel target and the projectile fragments were separated using the Ligne d'Ions Super Epluchés (LISE) spectrometer. ^{47}Fe was identified by time of flight and energy loss measurements. "A three hour run leads to the first identification of ^{47}Fe with 23 counts." The half-life was determined via maximum-likelihood analysis of the time spectrum to be 27^{+32}_{-10}ms. Pougheon et al. had observed one count of ^{47}Fe at GANIL in 1987, but attributed the uncertain event to background (1987Po04).

Adapted from reference (2010Sc18)

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