

WHAT IS ISOTOPICALLY STRANGE XENON? D. Heymann, Department of Geology and Geophysics, Rice University, Houston TX, USA.

Isotopically strange xenon (ISX) is strongly enriched in the p- and r-isotopes relative to solar and terrestrial xenon [1]. However, these ‘excess’ components have never been separated from one another, nor have they ever been made free of s-components. It was argued that the excess p- and r- components had formed in supernovae and had been ion-implanted into nanodiamonds [2]. It is argued here that ISX with the smallest observed $^{130}\text{Xe}/^{136}\text{Xe}$ is a fundamental galactic Xe gas which formed when p- and r-, and s-components were cycled through C-rich stars and implanted into diamonds with kinetic energies on the order of 1 keV in stellar winds.

References: [1] Lewis R. S. et al. (1975) *Science*, 190, 1251–1262. [2] Lewis R. S. et al. (1987) *Nature*, 326, 160–162.