Isotopic ratios and fractionation in the local Universe

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The knowledge of isotopic abundances is important in galaxy evolution studies because isotopes provide diagnostics for the chemical enrichment in galaxies over time. While measurements of isotopes in large sample of stars would be ideal to determine the fossil record of the enrichment history, in practice this is hampered by the need of very high resolution, high signal-to-noise spectroscopic data. A complementary, or alternative, method is to measure isotopic ratios from observations of gas-phase interstellar medium (ISM) isotopic abundances. In this talk I shall review the observations of the most abundant fractionated species in nearby galaxies and present recent modeling efforts aimed at investigating the physical and chemical conditions that can lead to a large spread of isotopic ratios in external local galaxies.