

The Origin of the Elements

A Lecture by Ivanna Escala

Friday, June 2nd, 8:00PM

Cahill Center for Astronomy and Astrophysics
California Institute of Technology

To understand the origin of the elements in the periodic table, we must first look to the stars. Space contains astrophysical laboratories able to achieve energies and densities high enough for nuclear fusion, which is required for the formation of the various elements. Examples of these laboratories include the interiors of stars, explosive supernovae, and the ultra-hot gas of the early universe minutes after the Big Bang. We will explore the various environments in which different elements form, addressing the question of why only certain elements can form in specific astrophysical events. In addition, we will investigate how scientists measure these elements in our surrounding universe, from the backyard of our Solar System to distant galaxies.

These are free lectures at a public level followed by guided stargazing with telescopes (weather permitting). All events are held at the Cahill Center for Astronomy and Astrophysics at Caltech. No reservations are needed. Lectures are 30 minutes, stargazing lasts 90 minutes. Stay only as long as you want. For directions, parking, weather updates, and more information, please visit:

<http://outreach.astro.caltech.edu>