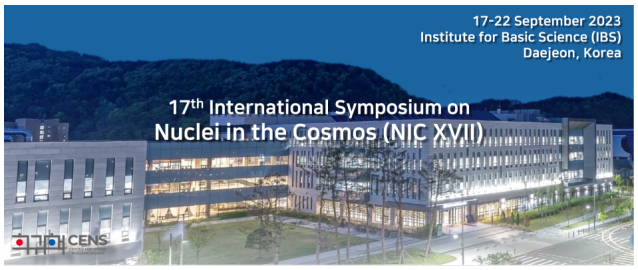

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The 12C/13C isotopic ratio at the dawn of chemical evolution

Tuesday, 19 September 2023 12:00 (15 minutes)

The 12C/13C isotopic ratio is an important diagnostic tool in astrophysics, providing insights into the formation and evolution of stars and galaxies. In this talk, we will discuss the measurement of this ratio using data from the ESPRESSO instrument, which is one of the most powerful spectrographs in the world.

We will focus on the information obtained from the oldest stars in the Milky Way, the carbon-enhanced metal-poor (CEMP-no) stars. By analyzing the isotopic ratios in these stars, we can determine the changes in the ratio over time and how this has affected the overall composition of the Galaxy. We will also highlight the importance of these measurements for our understanding of the chemical evolution of the Milky Way and the critical role of spectrographs like ESPRESSO in the understanding of our Galaxy.

Primary author: Dr AGUADO, David (Instituto de Astrofísica de Canarias)

Presenter: Dr AGUADO, David (Instituto de Astrofísica de Canarias)

Session Classification: The early Universe, galactic evolution

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