

Nucleosynthesis and galactic chemical evolution

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In this lecture, the discussion will center on the production of elements in stars and on the chemical evolution of galaxies. More specifically, I will introduce the main ingredients of numerical chemical evolution models and compare their predictions to data for the Milky Way and other galaxies. Current uncertainties impacting our understanding of the formation and evolution of galaxies will be critically examined. The improvements that are expected in the coming decades thanks to current and future space missions as well as new instrumentation from the ground will also be discussed.