

Chemical evolution of galaxies and galaxy formation mechanisms

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I will describe the results of models for the chemical evolution of galaxies of different morphological type (ellipticals, spirals and irregulars), and compare them with observations in order to impose constraints on the mechanisms of formation and evolution of galaxies. In particular I will address the following questions: are the characteristics of the spheroids (ellipticals and bulges) more compatible with the monolithic or the hierarchical scenario? Can we safely conclude that dwarf galaxies are the building blocks of larger systems? Are population III stars necessary to reproduce the chemical properties of stellar populations in galaxies?

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