

The chemical abundances of the star-forming regions of galaxies contain valuable information about their assembly histories, as well as about the processes that regulate the star formation history and the mixing of chemical elements.

In particular, they encode the history of recent mergers and strong gas inflows, as well as the impact of SN and AGN feedback that could trigger these events.

I will summarise results on relation between metallicity gradients of star-forming regions and the history of formation of galaxies and a secondary dependence of the MZR on the metallicity gradients.