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# The fundamental metallicity relation: from z~0.8 (VIPERS) to z~0 (SDSS)

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The chemical evolution of galaxies is the direct product of the whole history of star formation. This relation is encoded in the so-called "fundamental metallicity relation" (FMR), a three-dimensional relation that connects stellar mass, star formation rate, and metallicity.
The FMR is mainly studied for star-forming galaxies at low redshift, z~0 with the Sloan Digital Sky Survey (SDSS). Very low statistics are available at higher redshift but the FMR shows no evolution with cosmic time. In my talk, I will present the analysis of the FMR at intermediate redshift, 0.5<z<0.8, using VIMOS Public Extragalactic Redshift Survey (VIPERS) data. I will focus on: i) how the comparison of samples at different redshifts, and the conclusions about the evolution of the FMR, can be affected by different biases introduced during the data selection and the observations or ii) the method of comparison; iii) the search for footprints left on the FMR by galaxy evolution.

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