

## Metallicity gradients in quiescent galaxies at $z \sim 2$ (Marcella Longhetti)

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The advent of the E-ELT telescope in the next decade, combined with the new generation instruments, will provide astronomers with the possibility to reach a spatial resolution higher than ever before (16 times the actual HST resolution), combined with a collecting area larger than 20 times the largest actual telescopes. This new facility will then offer the possibility to study the stellar content OF galaxies and IN galaxies at  $z \sim 2-3$ , that is in a range of redshift where a large part of their evolution is expected to take place. Here we present a pilot study of the analysis of the metallicity gradient in an early type galaxy at  $z \sim 2$ , based on the slitless low resolution WFC3@HST spectra. The target galaxy is one of the 15 quiescent galaxies confirmed members of the  $z=1.8$  JKCS 041 (Andreon et al. 2009). Preliminary results on its stellar content will be presented. The presented analysis is a clear scientific case that would benefit of large improvement from the next coming E-ELT facilities.

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