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SHARDS Team ()

Presentation Requested: oral
Category: Assembly of Galaxies / Mass & Structure Evolution
Question: Other

The earliest phases in the Star Formation History of massive galaxies

We will present some of the first results from the Survey for High-z Absorption Red and Dead Sources (SHARDS) concerning the characterization of the Star Formation History of (star-forming and quiescent) massive galaxies at z=1.0-2.5. Our ultra-deep medium-band survey was especially designed to measure absorption indices closely correlated with very relevant stellar population parameters, such as the age or the star formation timescale. Here we will discuss on the robustness of our determinations of the SFH of massive galaxies at z 1 based on the unique combination of SHARDS and HST/WFC3 grism data (in the H and J bands), jointly also with broad-band UV-to-MIR data. We will argue about how ALMA can provide the final key to the puzzle by determining the gas and star formation location and dynamics. The combination of all these data will certainly allow us to put together a robust evolutionary scenario involving the whole population of very active star-forming galaxies, post-starburst galaxies and quiescent systems discovered at z¿1 in the last 10-15 years.