Uncovering Early Galaxy Evolution in the ALMA and JWST Era
Proceedings IAU Symposium No. 352, 2019
E. da Cunha, J. Hodge, J. Afonso, L. Pentericci & D. Sobral, eds.

doi:10.1017/S1743921320001325

The role of the JWST near-infrared spectrograph NIRSpec in understanding the assembly and evolution of galaxies

Catarina Alves de Oliveira

European Space Agency, USA

Abstract. The near-infrared spectrograph NIRSpec is one of four instruments aboard the James Webb Space Telescope (JWST). It offers seven dispersers covering the wavelength range from 0.6 to 5.3 micron with resolutions from R $\sim$ 100 to R $\sim$ 2700. Using an array of micro-shutters for target selection, the multi-object spectroscopy mode of NIRSpec will be capable of obtaining spectra from a few tens to more than 200 objects simultaneously. It also features an integral field unit with a 3 by 3 arcseconds field of view, and various slits for high contrast spectroscopy of individual objects. We will provide an overview of the capabilities and performances of these three observing modes highlighting how NIRSpec will contribute to the quest to further understand the assembly and evolution of galaxies from the end of re-ionisation epoch to the present day.