

Title: First results of the JWST Advanced Deep Extragalactic Survey (JADES): new insights into the properties of galaxies in the Reionization Epoch.

Abstract:

The JWST Advanced Deep Extragalactic Survey (JADES) is the largest ongoing observational program with JWST targeting the high-redshift Universe. JADES exploits the complementarity and unique capabilities of the NIRCам imager and of the NIRSpec multi-object spectrograph to identify and target galaxies out to redshift 13 and beyond. The exquisite quality of the data and the ability, for the first time, to obtain high-quality rest-frame UV-to-optical spectra of galaxies during the Reionization epoch is revolutionizing our understanding of their properties and posing new challenges to galaxy formation models. In this talk, I will review the early results obtained by JADES, focusing on the star, gas and dust properties of galaxies and on the conditions of the Intergalactic Medium during the epoch of Reionization.