First results from the JWST on the Orion Bar Photodissociation Regino

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Ultraviolet photons emitted by O/B stars have profound effects on the evolution of interstellar matter in our Galaxy and throughout the Universe, from the era of vigorous star formation at redshifts of 1-3 to the present day. The dominant radiative feedback processes can be probed by observations of the Photo-Dissociation Regions (PDRs) where the far-ultraviolet photons (E=5.17-13.6 eV) create warm regions of gas and dust in the neutral atomic and molecular gas.

In this talk, we will present the first results of the PDRs4All project, which is an Early Release Science (ERS) program to observe the Orion Bar PDR with the James Webb Space Telescope (JWST).