

# Earliest Stellar Luminosity Distribution

Distribution of the power output across all wavelengths of stars (referred to as bolometric luminosity,  $L_{bol}$ ) of known bright central regions of galaxies (referred to as active galactic nuclei, AGN) as a function of redshift (where higher redshifts represent older ages). The James Webb Space Telescope (JWST) opens up a much wider discovery space, now including much fainter and older stellar objects than what has ever been probed (adapted from Scholtz et al., 2023). The brown shaded area shows the range of luminosity and ages spanned by studies before JWST. The blue symbols show a compilation of AGN discovered by JWST, with stars showing type 1 (broad line) AGN and diamonds identifying type 2 (narrow line) AGN.

The graphic was developed during the breakthrough workshop 'The Chronology of the Very Early Universe According to JWST: The First Billion Years' at the International Space Science Institute (ISSI) in Bern, Switzerland.

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