A JWST view of submillimeter galaxies

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The discovery of a large population of bright sources at (sub-)millimeter wavelengths (e.g. Smail et al.1997; Hughes et al. 1998) continues to have a profound impact on our understanding of galaxy formation and evolution. These SubMillimeter-selected Galaxies (SMGs) are thought to host the most extreme star formation activities and are considered to be the progenitors of massive elliptical galaxies. Many of them are undetected even in the deepest HST surveys. As a result, some of their fundamental properties such as stellar ages, morphologies, star formation histories, and metallicities remain unknown, limiting our knowledge of the formation and evolution of the most massive galaxies in the Universe.
I will present new insights on this population brought by the James Webb Space Telescope (JWST) thanks to a powerful combination with ancillary ALMA and/or NOEMA observations in the Cosmic Evolution Early Release Science (CEERS) Survey.