

## X49a Initial results of the CRISTAL Survey II: Resolved dust emission of typical star-forming galaxies at $z=4-6$

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Submillimeter morphologies of high redshift galaxies are essential for understanding galaxy evolution as a tracer of obscured star formation. In the ALMA cycle-8 large program, CRISTAL, we have individually detected dust continuum emission from 15 typical star-forming galaxies at  $z = 4 - 6$  in addition to [C II]  $158\mu\text{m}$  emission line. The fraction of dust-obscured star formation is  $\sim 50\%$  in the mass range of  $\log M_*(M_\odot) \sim 9.5-10.5$ , and it exhibits significant variety from one galaxy to another. Thanks to high-resolution and deep observations, we could measure the dust continuum size of these galaxies. The effective radii of the dust emission are on average  $\sim 1.5$  kpc and are almost comparable with the rest-frame UV sizes of these galaxies. The infrared surface densities of these galaxies are one order fainter than dusty star forming galaxies, which show a compact starburst in the center. Based on the comparable contribution of dust-obscured and dust-unobscured star formation and comparable spatial extent, it is suggested that typical star-forming galaxies are forming their disks through their widespread star formation.