

Dust production in galaxies at $z > 6$

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Dust production is a very important issue in galaxy evolution. Unfortunately, we are still unable to determine its formation mechanism. I will present the investigation of dust production in nine galaxies at the redshift $z > 6$, for which dust emission has been detected. In recent years, more accurate measurements were made using the most powerful instruments, eg ALMA, which contributed to better estimates of luminosities and sizes, and thus to determine the masses of gas, dust and stars in the studied galaxies. We conclude that asymptotic giant branch stars did not contribute to the dust formation significantly in these Early Universe galaxies, and that supernovae are unlikely to produce the bulk of the dust mass. This suggests that there must be some non-stellar mechanism, for example grain growth in the interstellar medium.