

Hubble Optical Collapse-Horizons from $z > 9$

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Abstract : The James Webb Space Telescope is predicted to detect redshifts to $z \sim 15$, with the current max reported at $z = 14.3$. However, there is a potential special-relativistic horizon that may already be in operation from $z > 9$. It is shown that the Lorentz transformations with Hubble recessional velocities $> 0.98c$ (boosts $\gamma < 0.19$) combine contraction and mass-booster to an apparent gravitational collapse relative to a distant observer, which leads to optical extinction. A Milky Way-type galaxy will disappear at $z \sim 15$. The collapse equations are derived, and galaxy types are compared to illustrate the range of z leading to extinction.

Keywords : hubble, redshift, relativistic, collapse

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