

X38a **Stellar Populations of Lyman-alpha Emitters at $z = 4.86$: A comparison to $z \sim 5$ LBGs**

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We investigate the stellar populations of 5 Lyman-alpha emitters (LAEs) at $z = 4.86$ in the area around GOODS-N field based on deep imaging data including $V, NB711, I_c, z'$ (Suraru/Suprime-cam), $3.6\mu\text{m}$, and $4.5\mu\text{m}$ (Spitzer/IRAC). By SED fitting, we find that the stellar masses range from 10^8 to $10^{10} M_\odot$. The resulting age, color excess, and star formation rate are respectively $7.4 - 437$ Myr, $0.1 - 0.4$ mag, and $55 - 209 M_\odot\text{yr}^{-1}$. We find that the rest-frame optical absolute magnitude is a good indicator of the derived stellar masses. A comparison of the stellar populations of the LAEs is made to those of LBGs at the same redshift in the same field. Deriving the stellar properties of the LBGs by fitting the same method ensures that effects of differing models do not interfere the comparison. Down to the same UV luminosity limit, the LAEs on average show less mass, less dust extinction, and lower star formation rates than LBGs, but the same age range. However, if the rest-frame UV or optical luminosity is fixed, these values are comparable to those of LBGs. We also examine the relations between the output properties from the SED fitting and the rest-frame Ly α equivalent width.