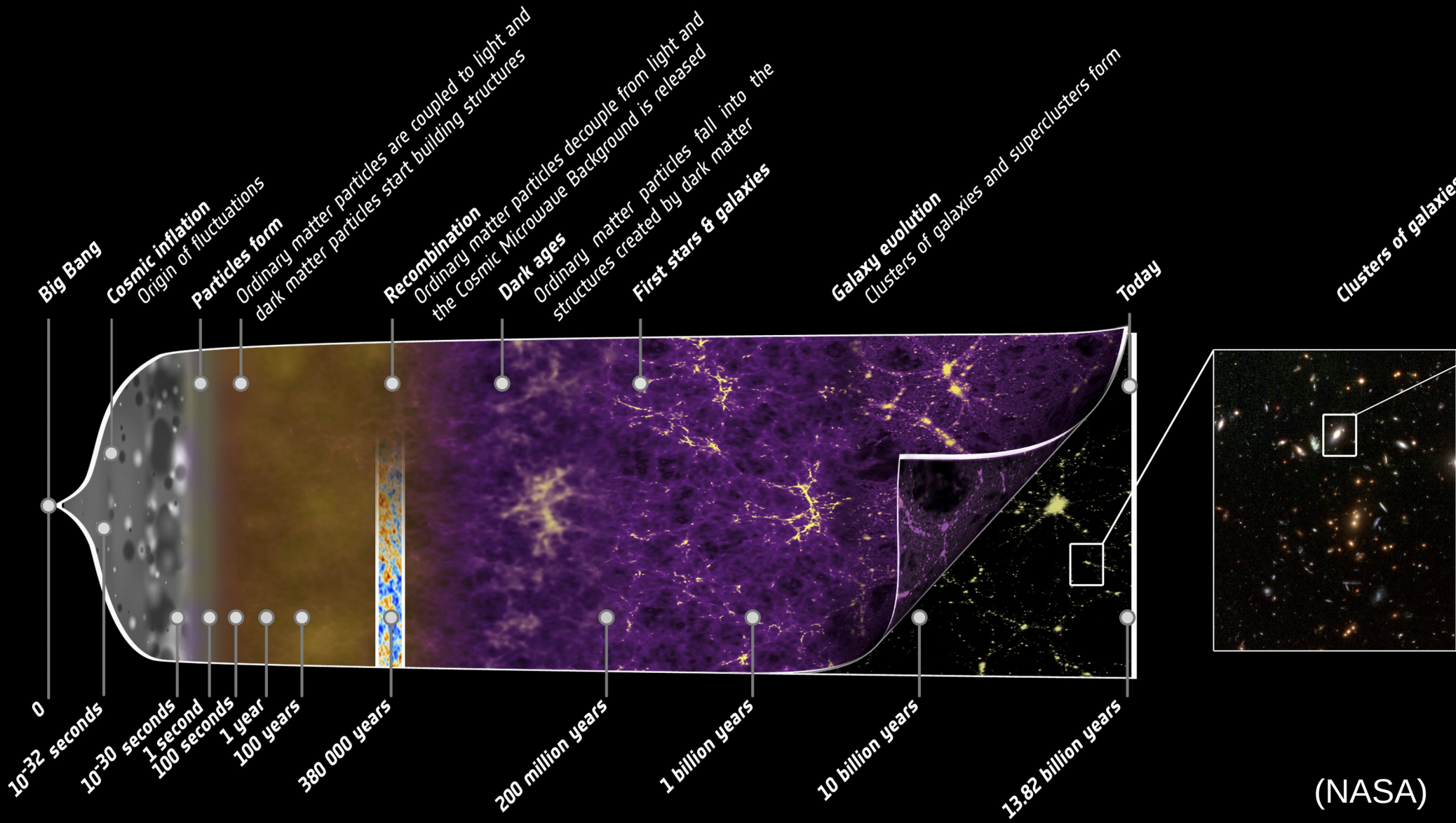


W14L2 – Cosmology

PSet #8: due Monday, May 2

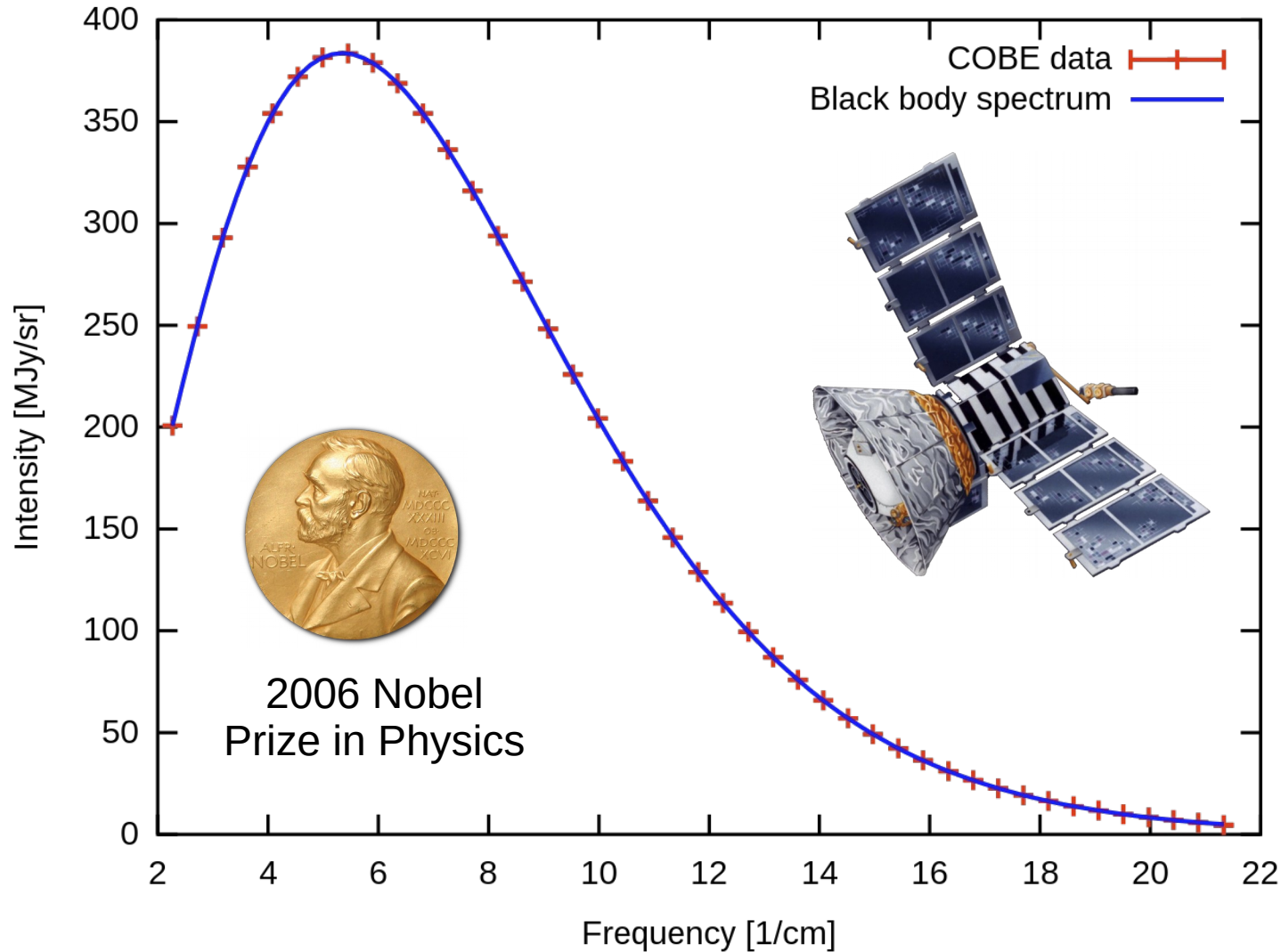
Final paper: due Wednesday, May 4

Final exam: Friday, May 13, **10:30 AM**



(NASA)

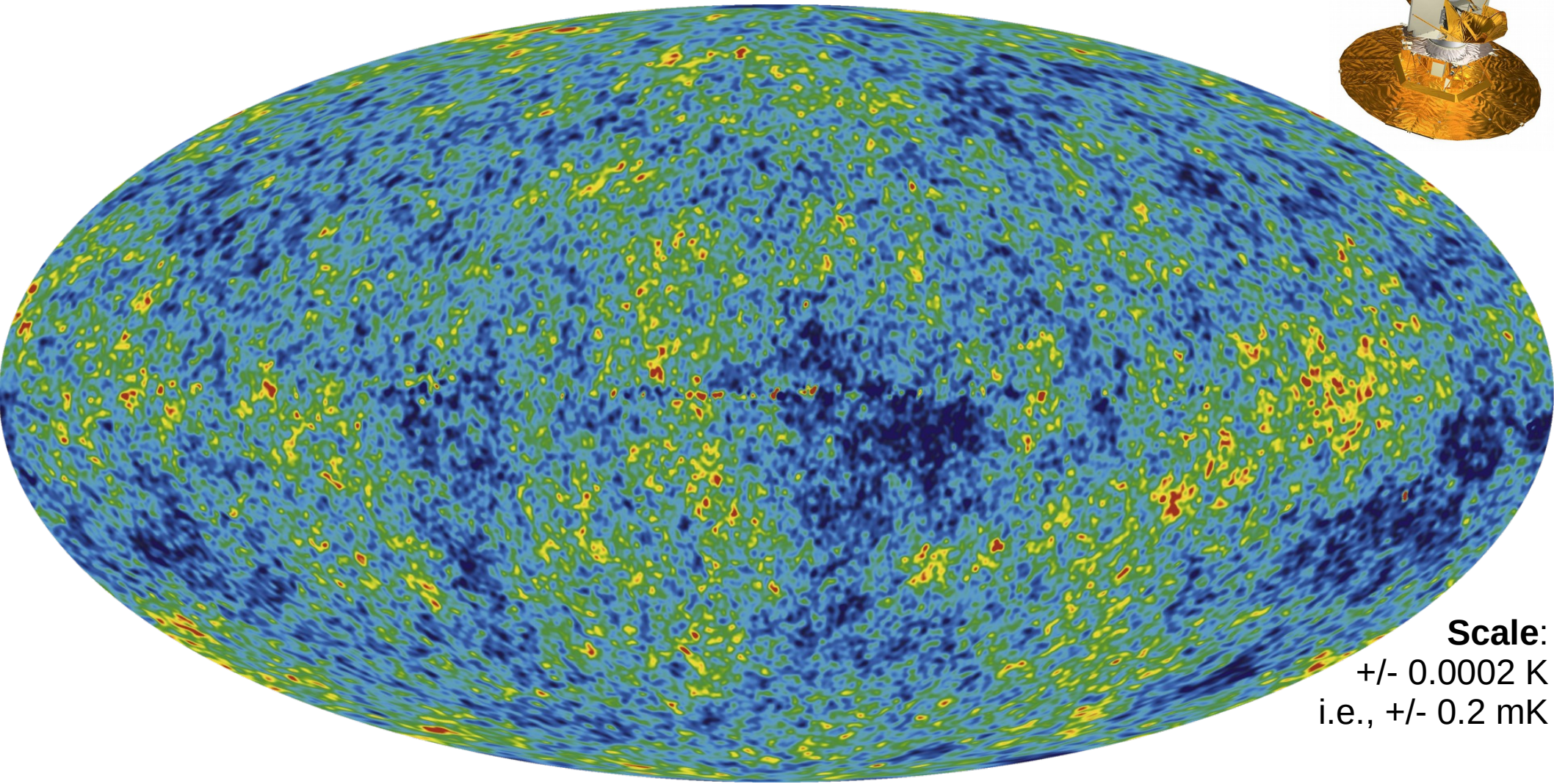
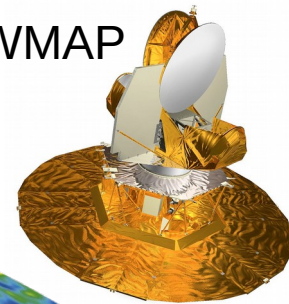
Cosmic microwave background spectrum (from COBE)



Blackbody Spectrum of Cosmic Microwave Background (CMB) Radiation

Fluctuations in the CMB:

WMAP



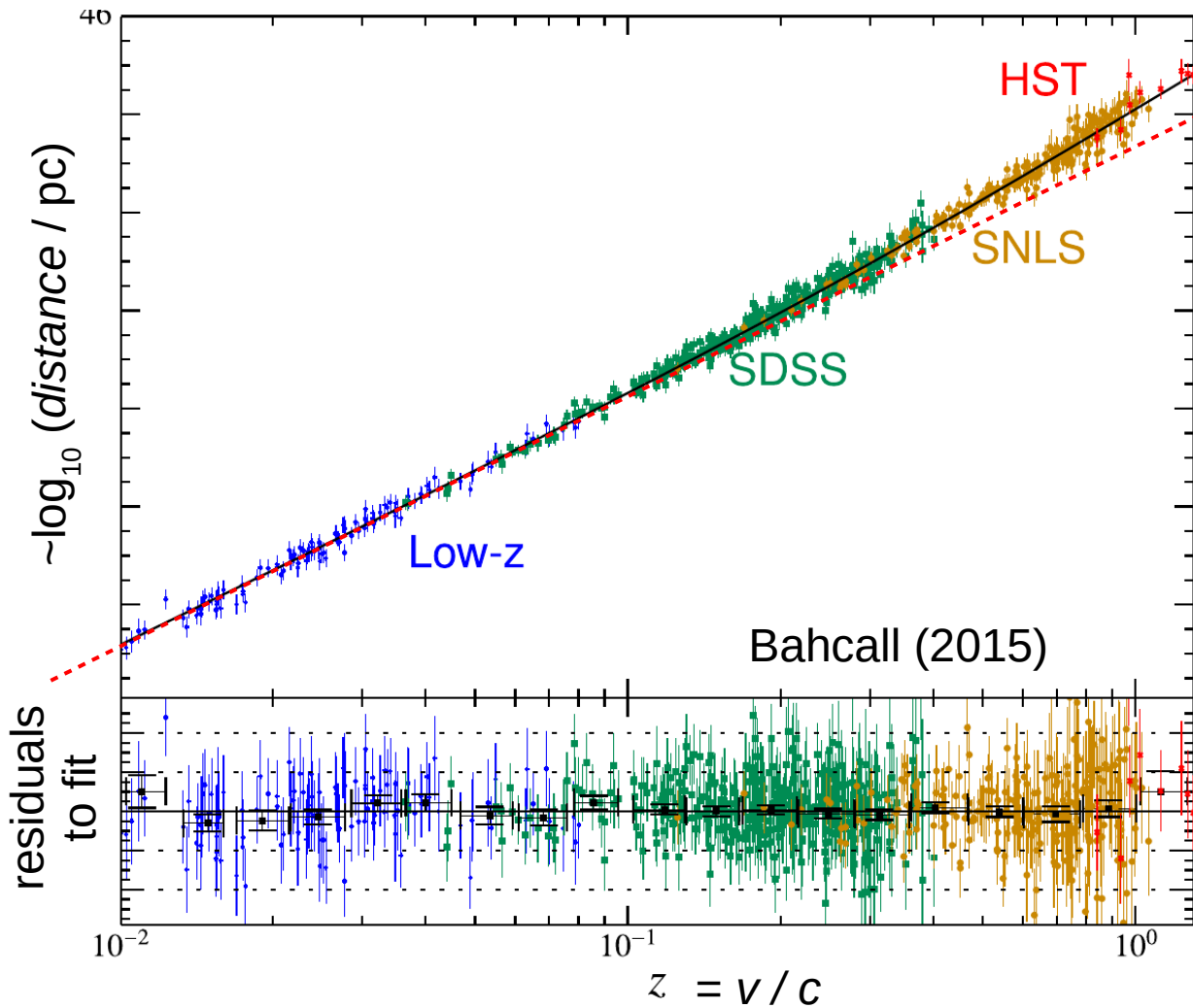
Scale:

+/- 0.0002 K

i.e., +/- 0.2 mK

Formation of Large-Scale Structure

- CMB fluctuations show the locations where galaxy clusters will eventually form.
- <https://crossfield.ku.edu/files/Formation%20of%20large%20scale%20structures.mp4>



Red line: constant expansion ($v = H_0 d$)

Modern 'Hubble Diagram' shows that expansion of universe is accelerating.

