

PECULIAR VELOCITIES OF TYPE I_A SUPERNOVAE IN CLUSTERS OF GALAXIES



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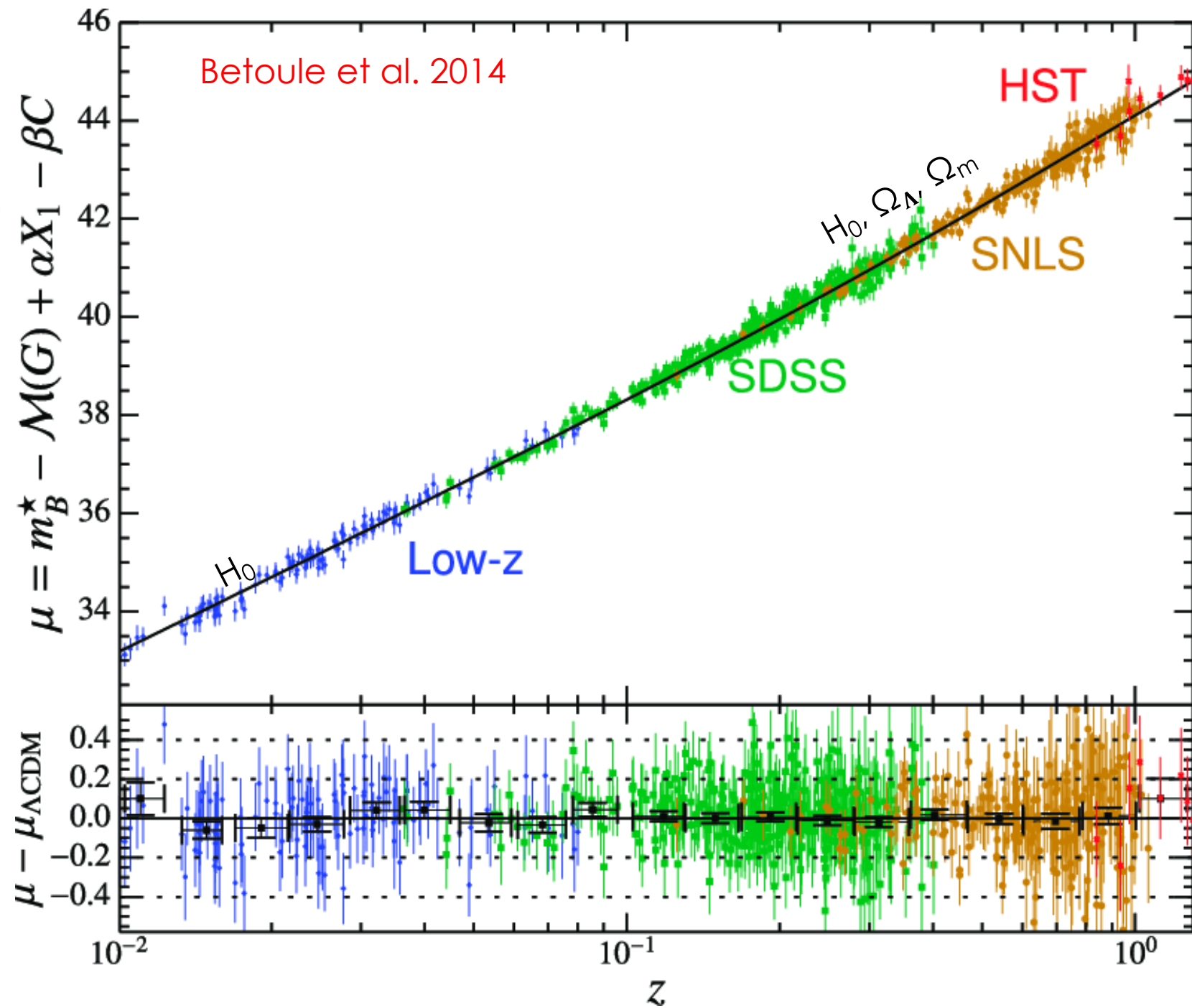
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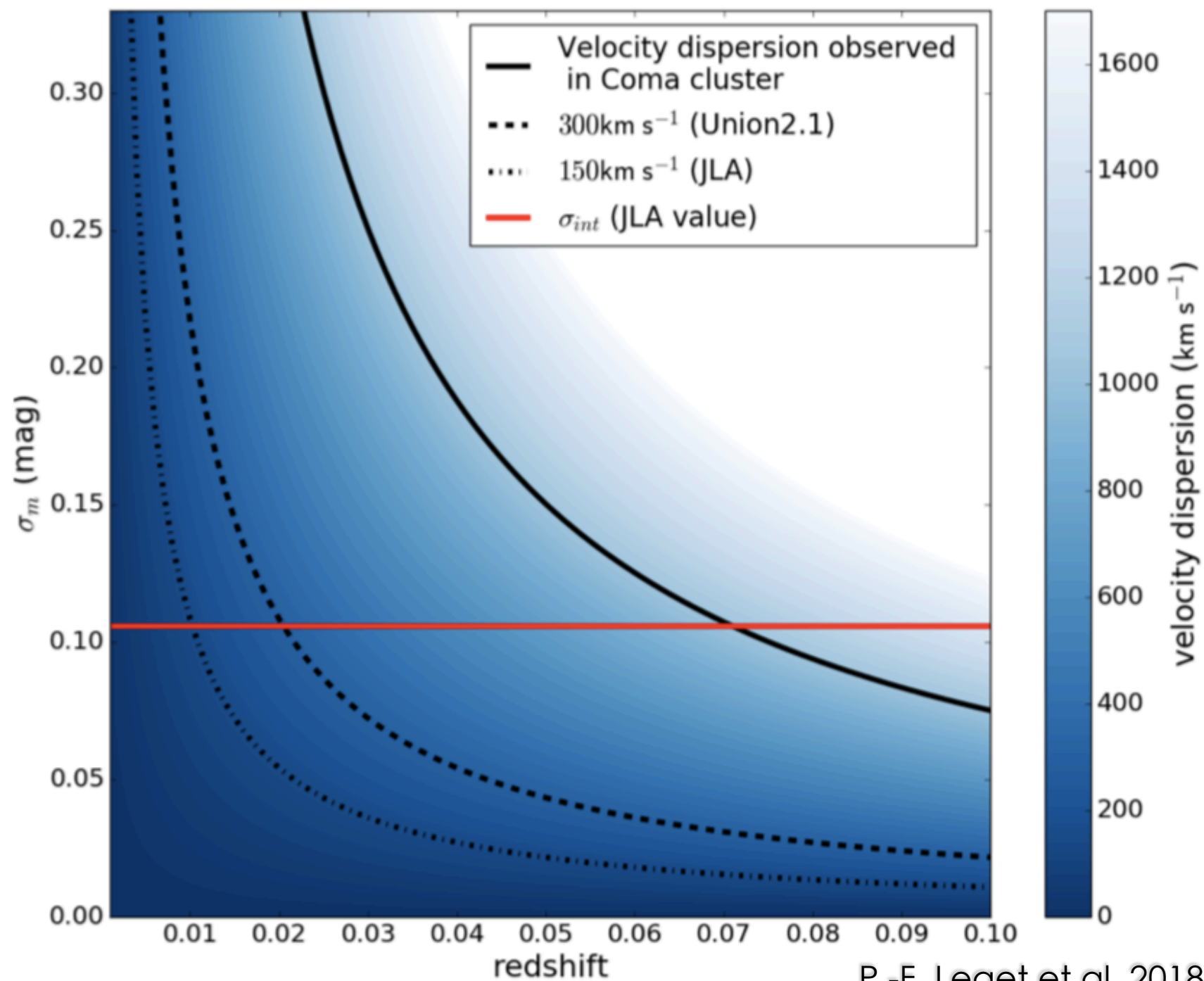
Cosmic Explosions 2019

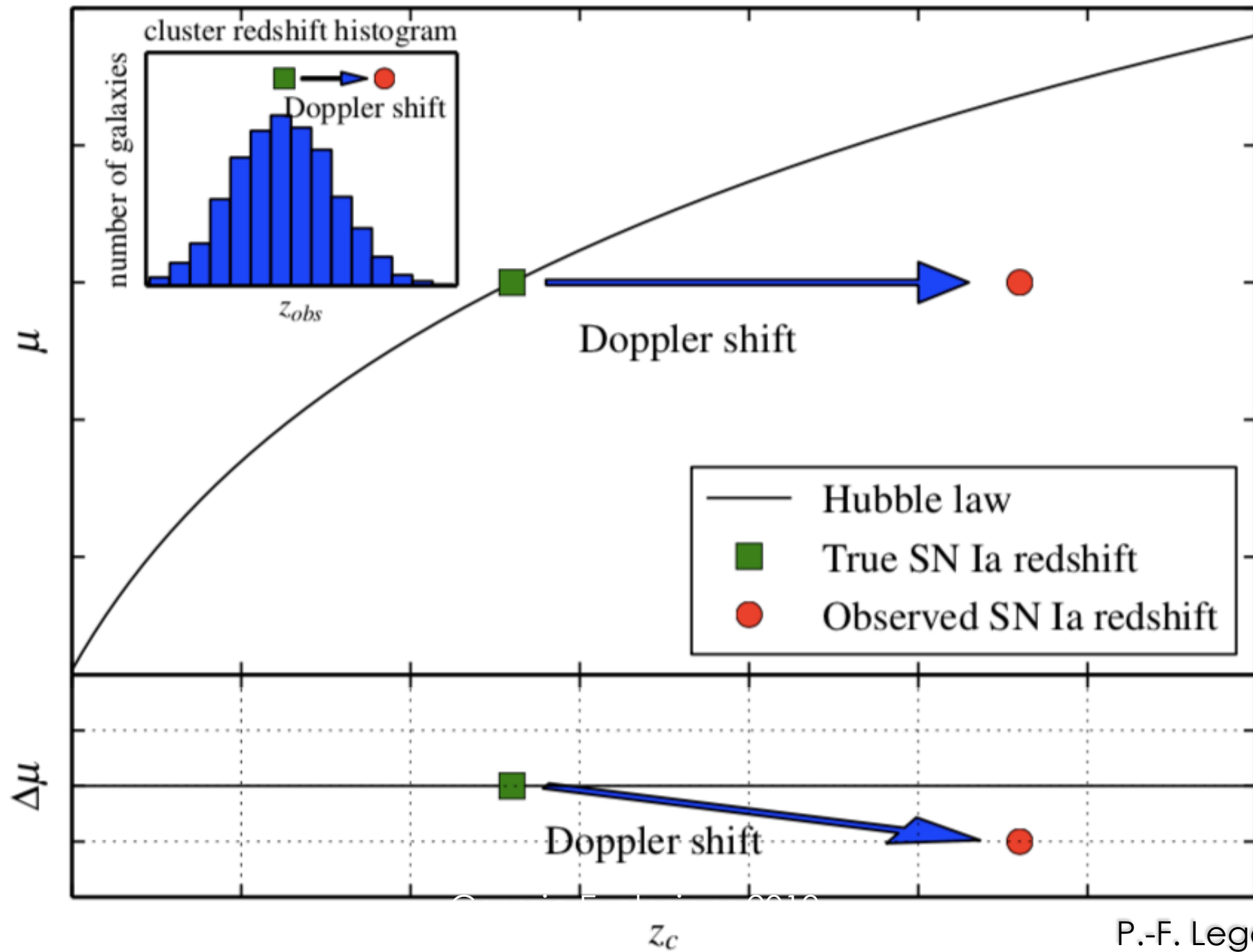
HUBBLE DIAGRAM



$$\sigma_m = \frac{5\sigma_V}{cz \ln 10}$$

$$0 < Z < 0.08$$



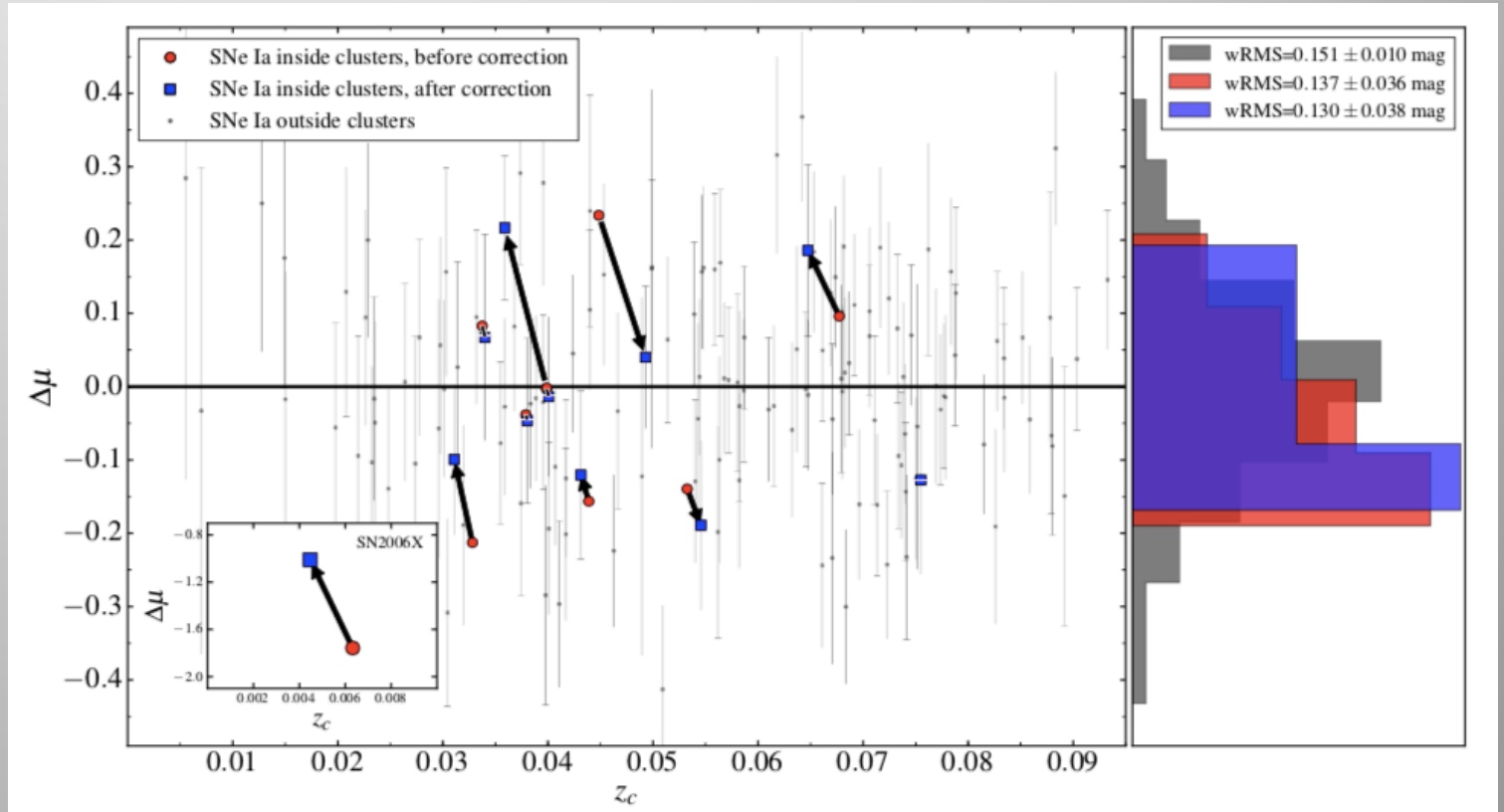


P.-F. LEGET ET AL. 2018

11 SNE IN CLUSTERS OF GALAXIES IN 145
SNE FROM THE NEARBY SUPERNOVA
FACTORY

$wRMS = 0.130 \pm 0.038$ MAG AFTER
CORRECTION

($wRMS = 0.137 \pm 0.036$ MAG – VALUE
BEFORE CORRECTION)



FUTURE PLANS

- FIND MORE SUPERNOVAE IN CLUSTERS OF GALAXIES
- TAKE INTO ACCOUNT PECULIAR VELOCITIES OF SUCH SNE
- DETERMINE COSMOLOGICAL REDSHIFTS FOR THEM
- PLOT THE HUBBLE DIAGRAM AND ESTIMATE ITS DISPERSION

Thank you for your attention!