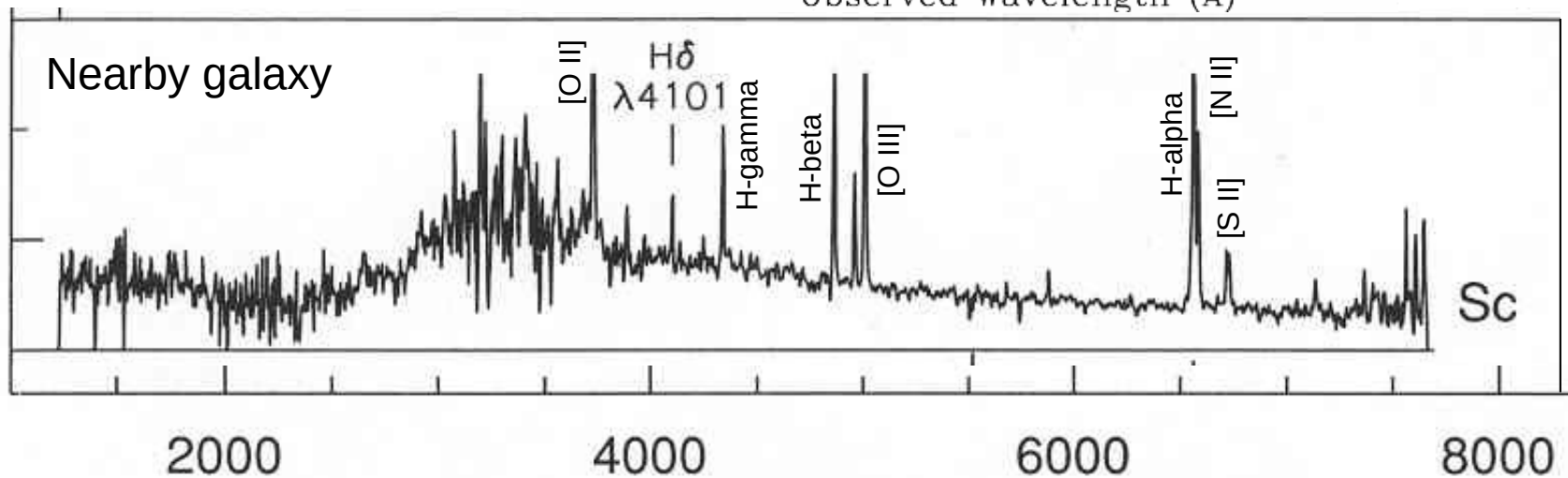
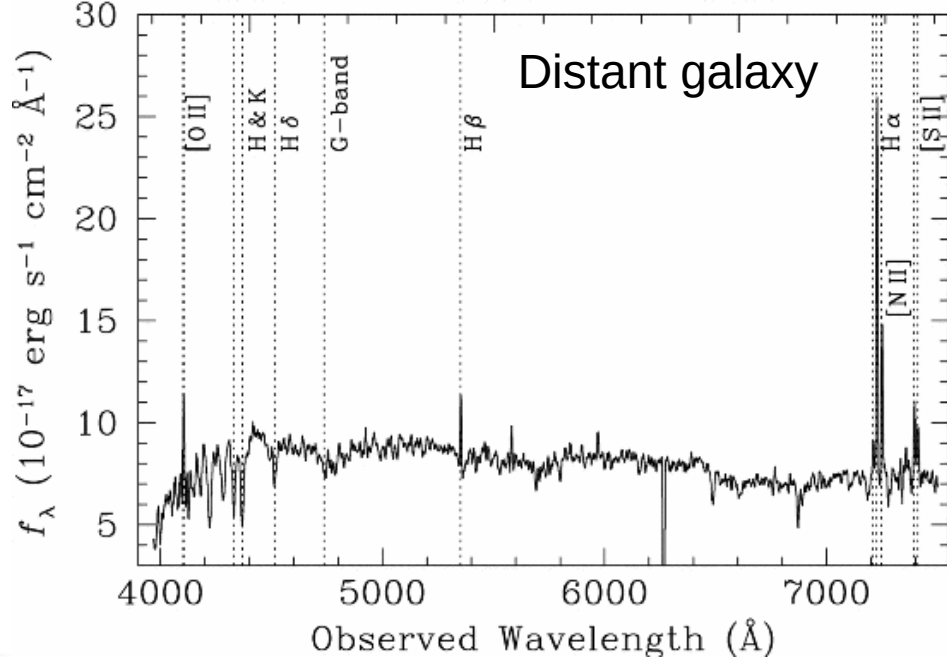


W14L1 – Expanding Universe

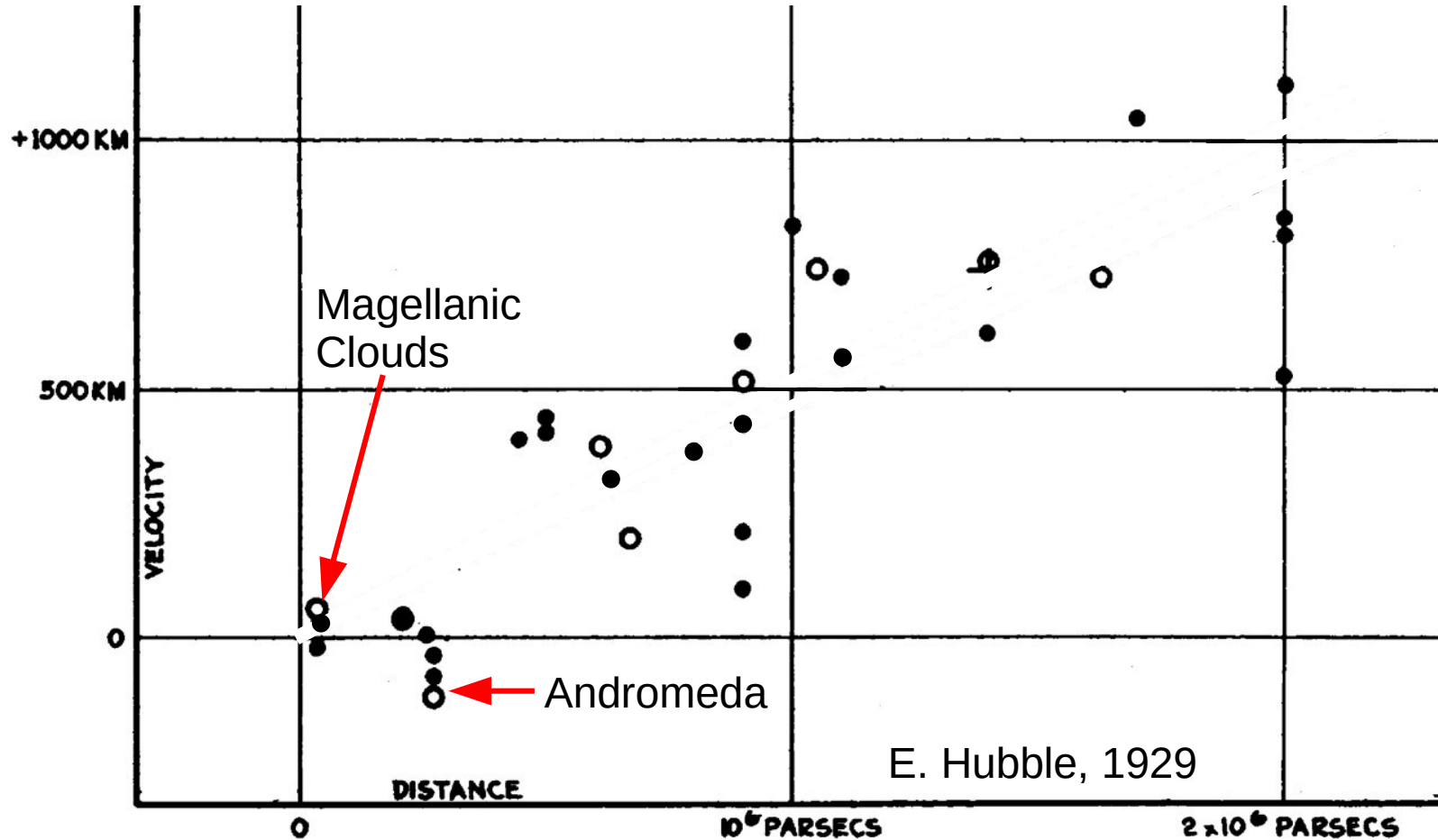
PSet #9: due Monday, April 29

Final paper: due Wednesday, May 1

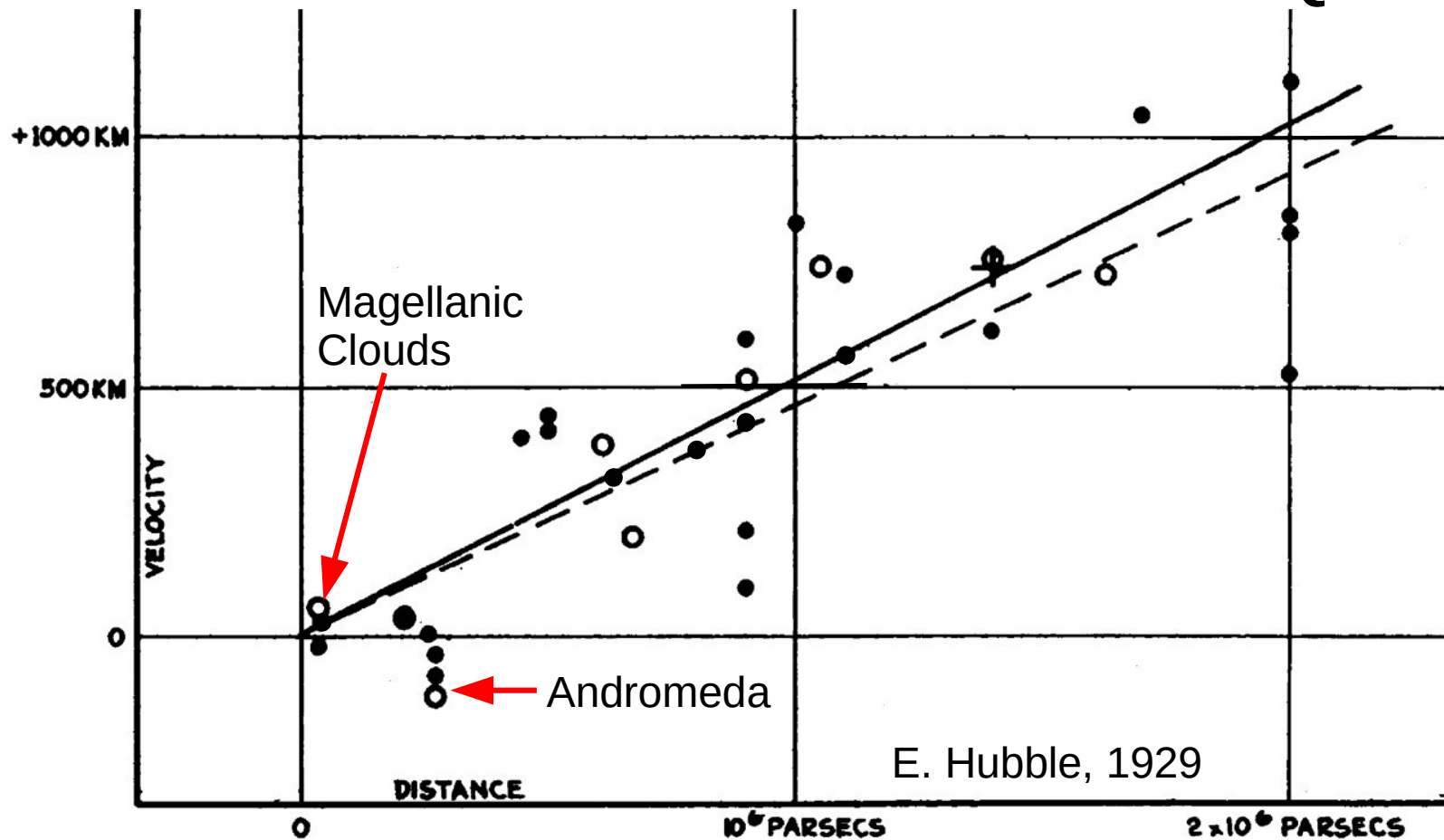
Spectra of two spiral galaxies:



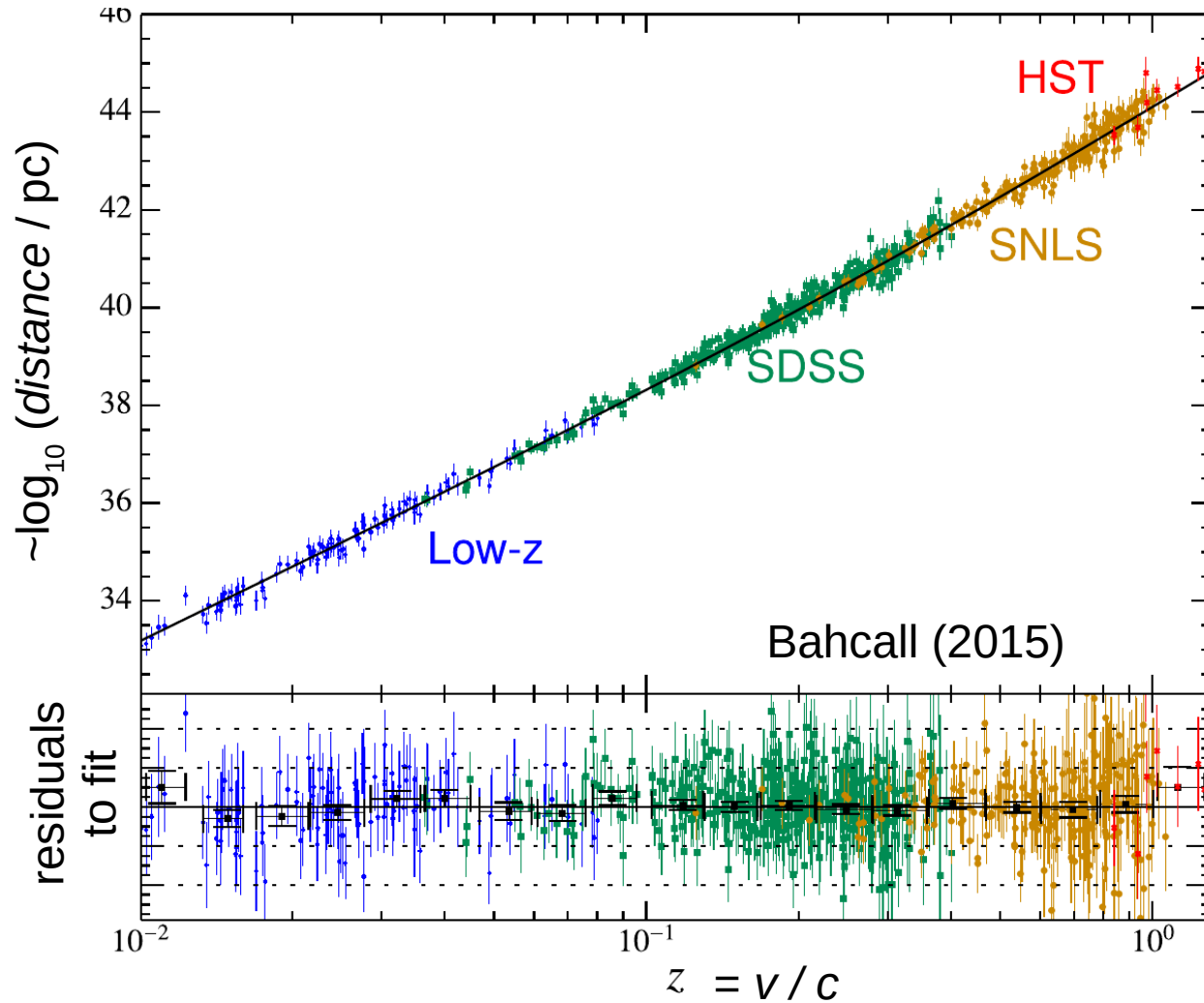
Galaxy velocity vs. Distance:

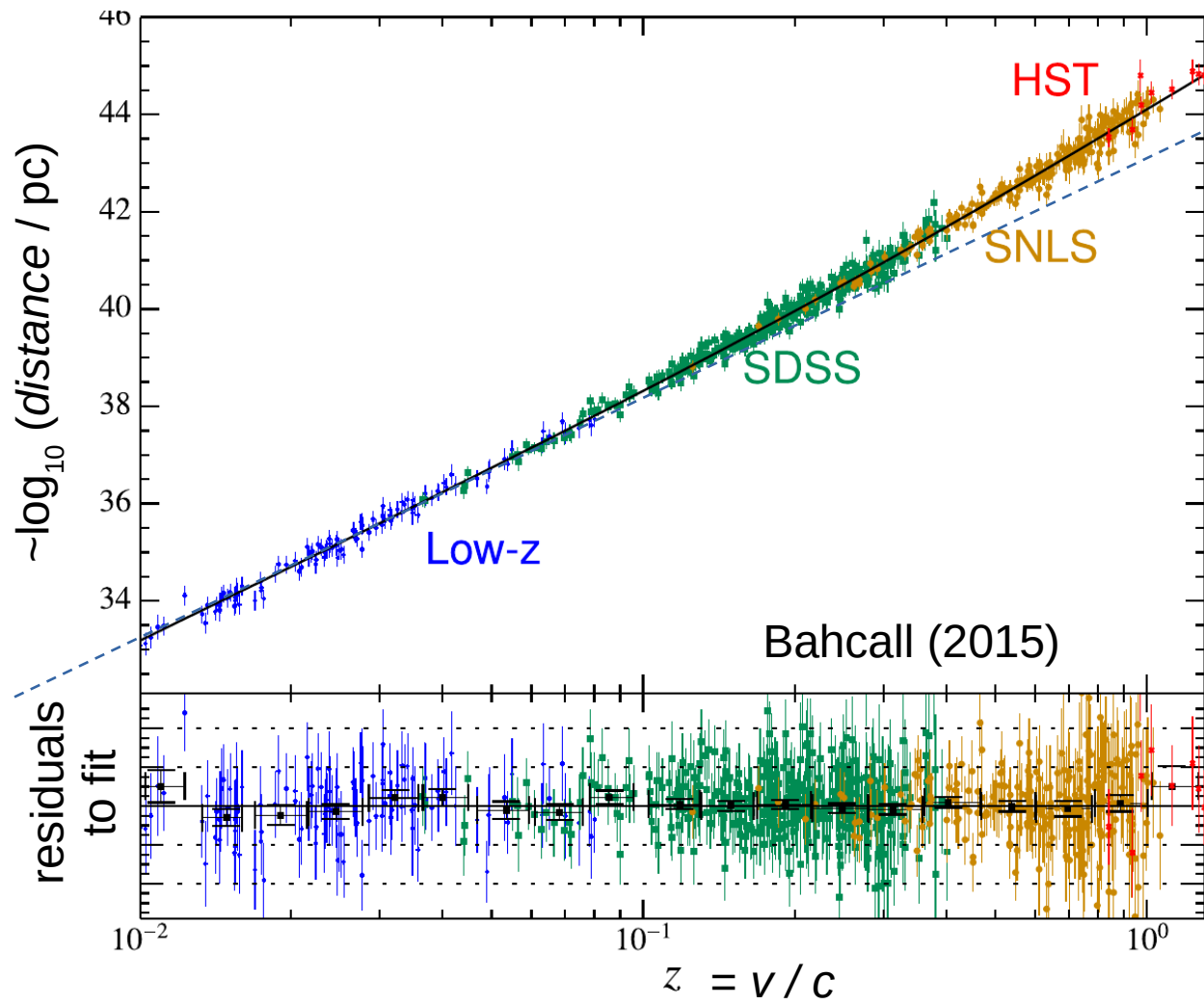


Expansion of the Universe: Distant Galaxies Recede More Quickly



Modern 'Hubble Diagram'





Modern
'Hubble
Diagram'

Bahcall (2015)

Modern Measurements of H_0 , the Hubble Constant

