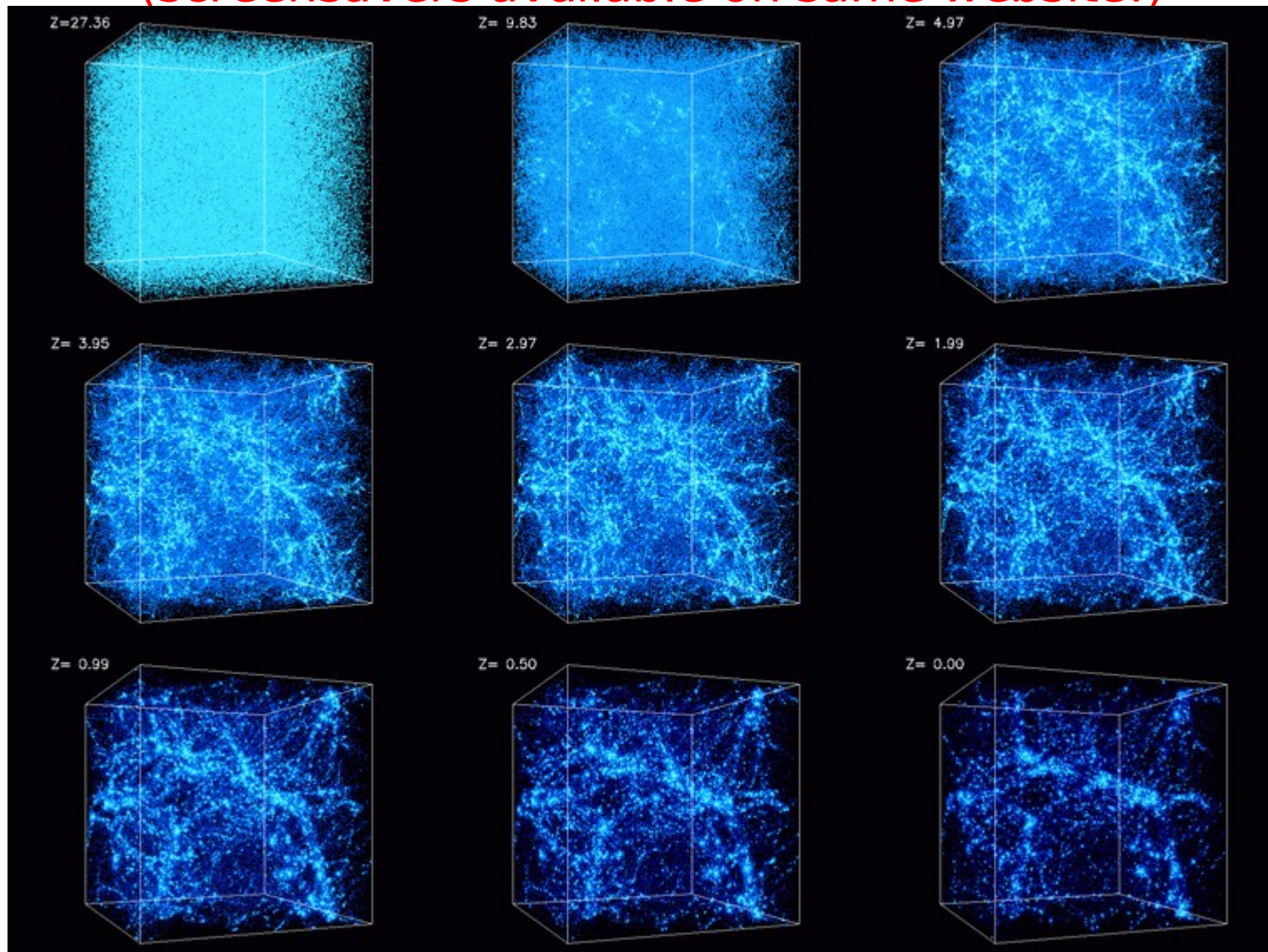


Structure Formation Simulation

(stills from the movie, cosmicweb.uchicago.edu/filament.html)

(screensavers available on same website!)



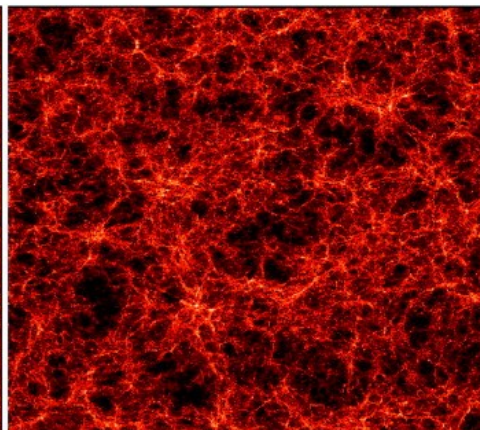
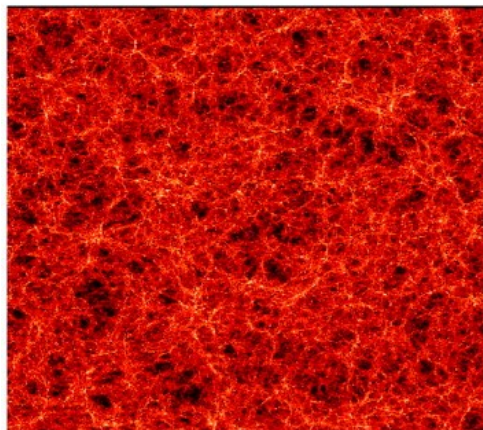
box is 140 million light-years across

Structure Formation: Different Models

redshift = 1

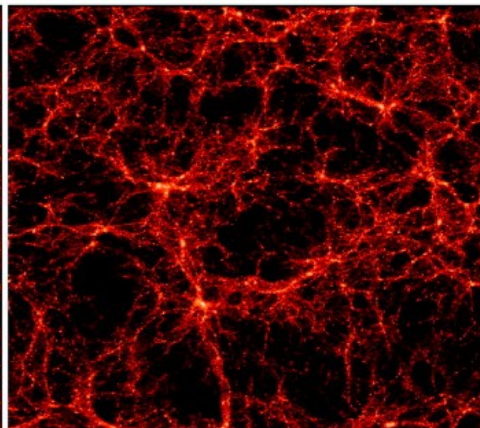
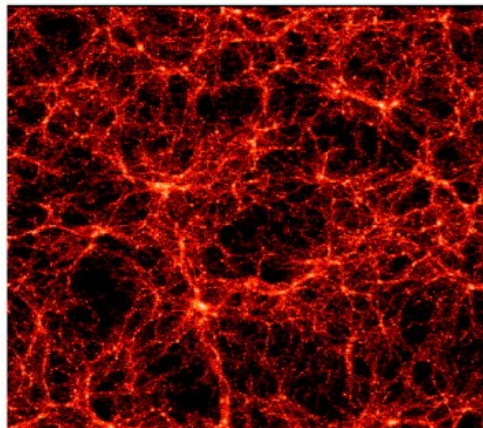
SCDM

τ CDM



Λ CDM

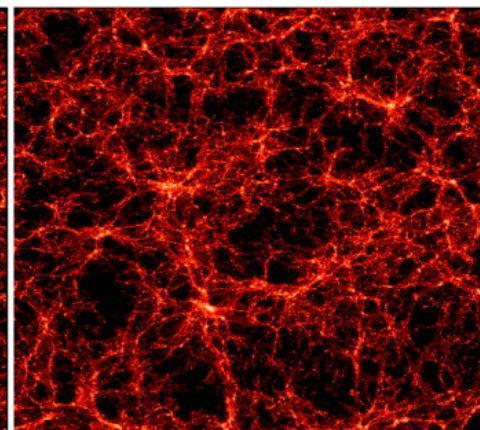
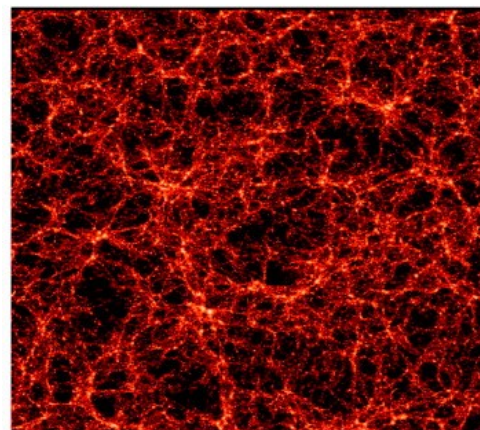
OCDM



redshift = 0

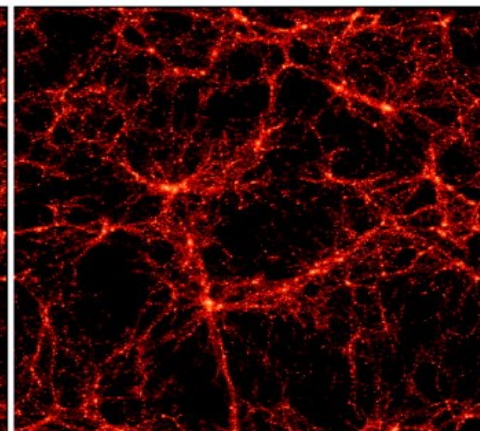
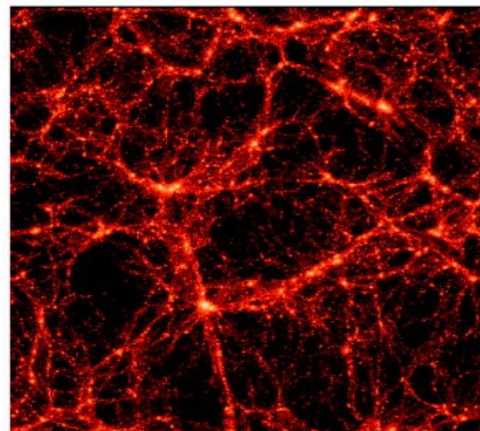
SCDM

τ CDM

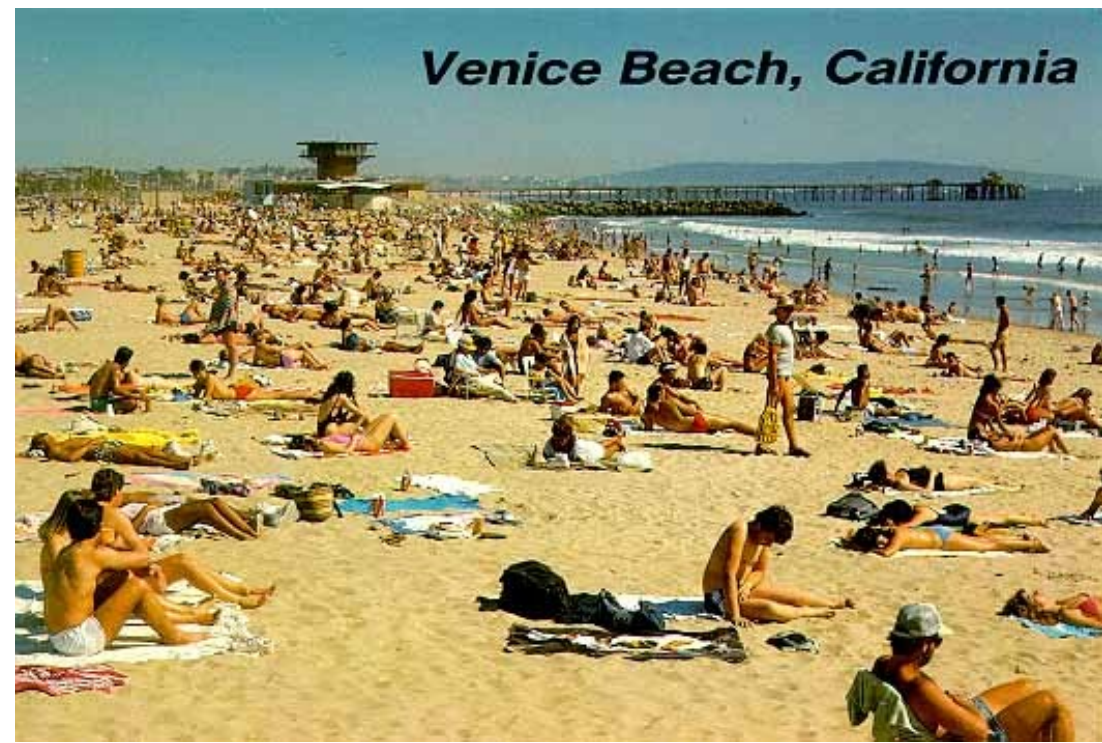


Λ CDM

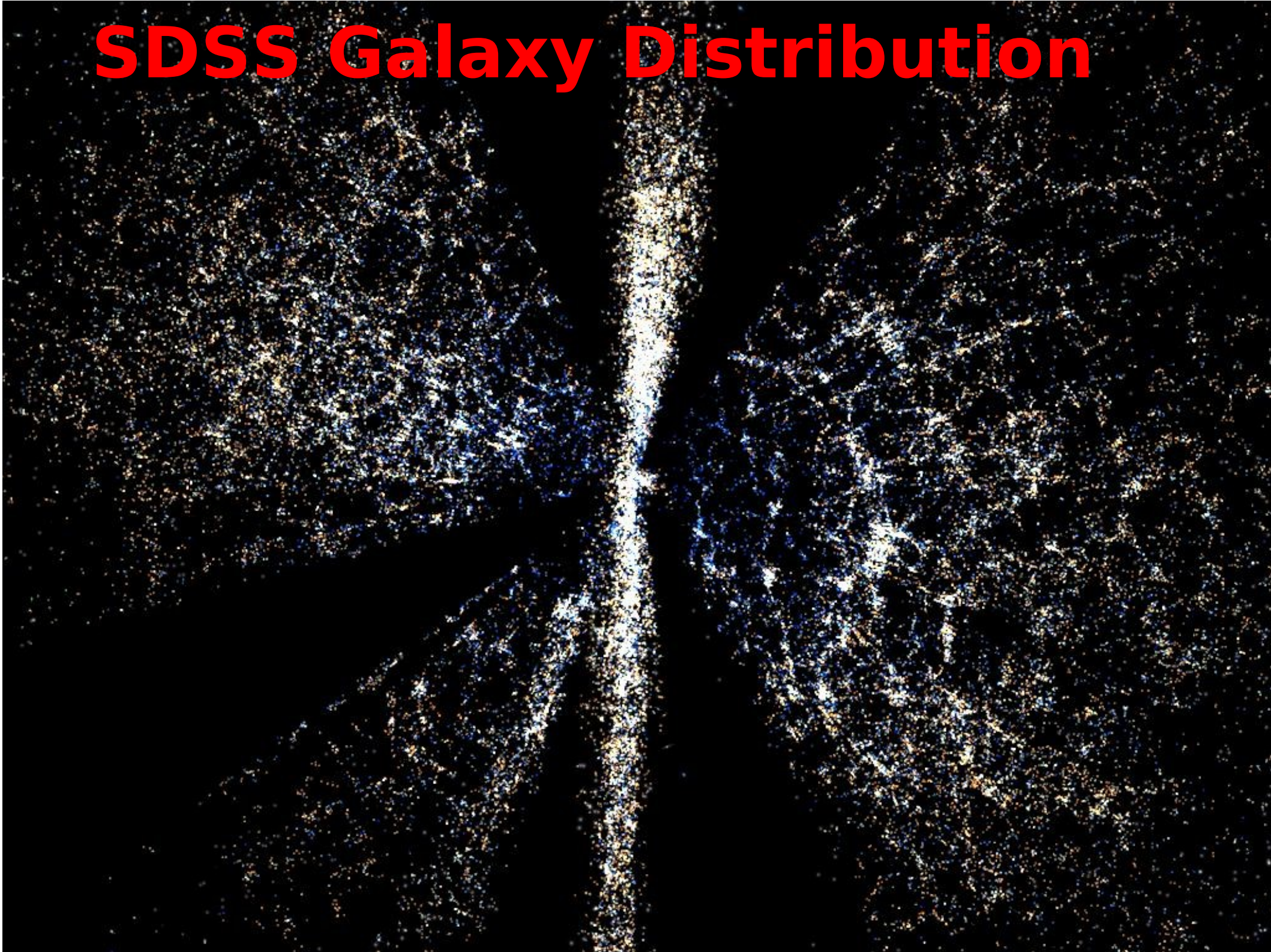
OCDM



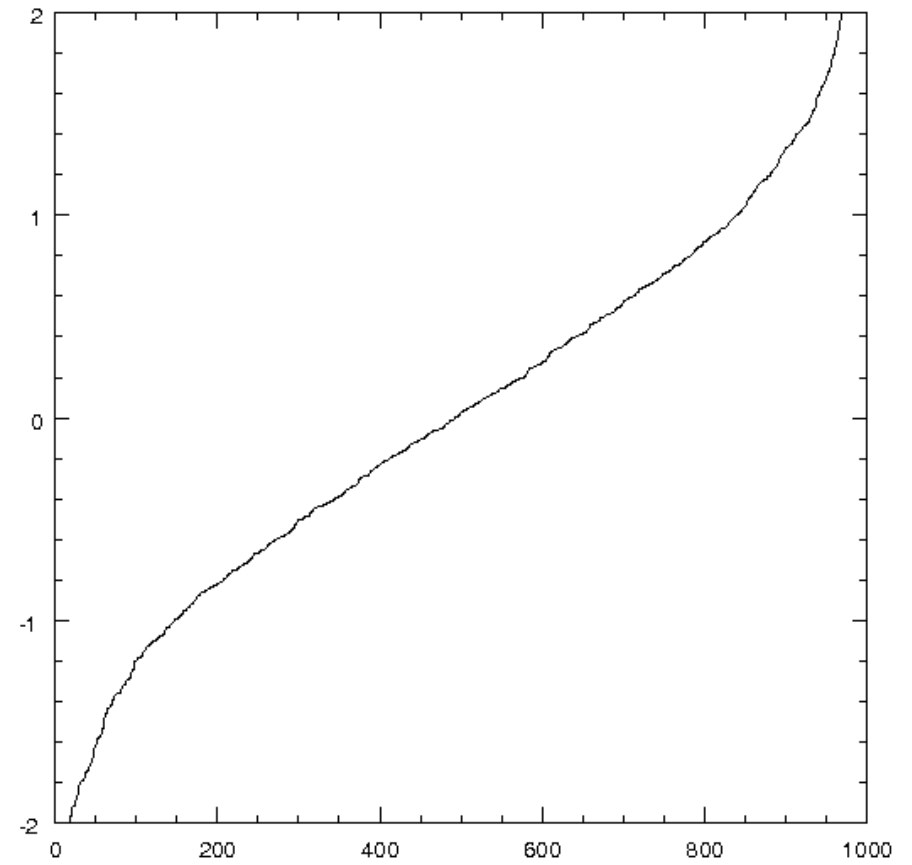
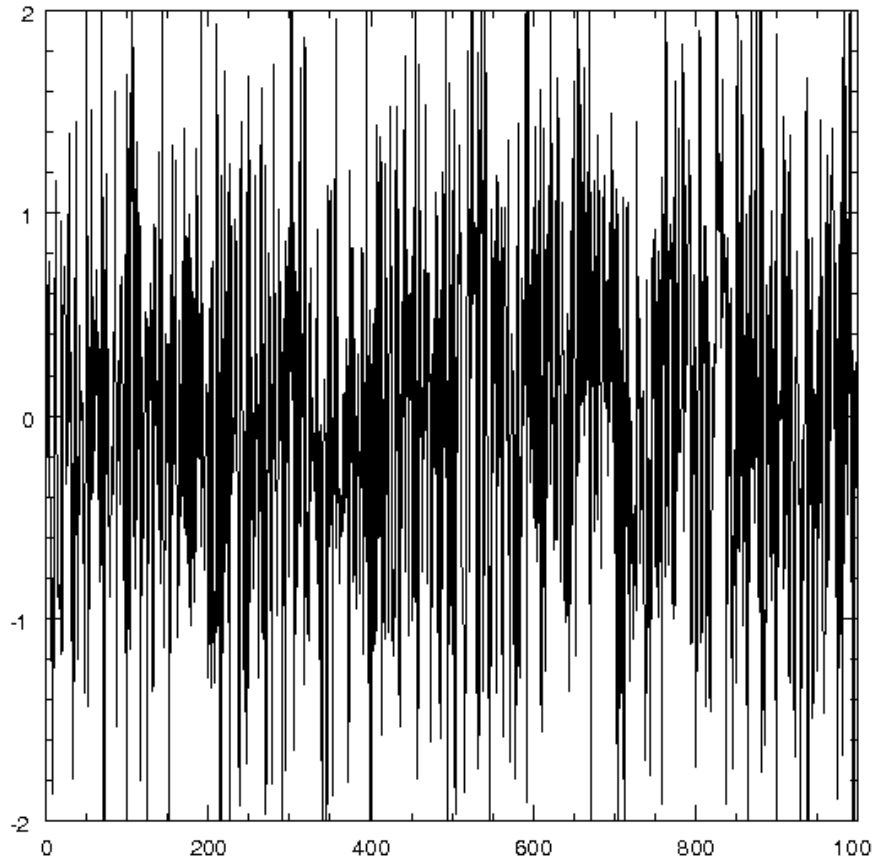
Correlation Functions

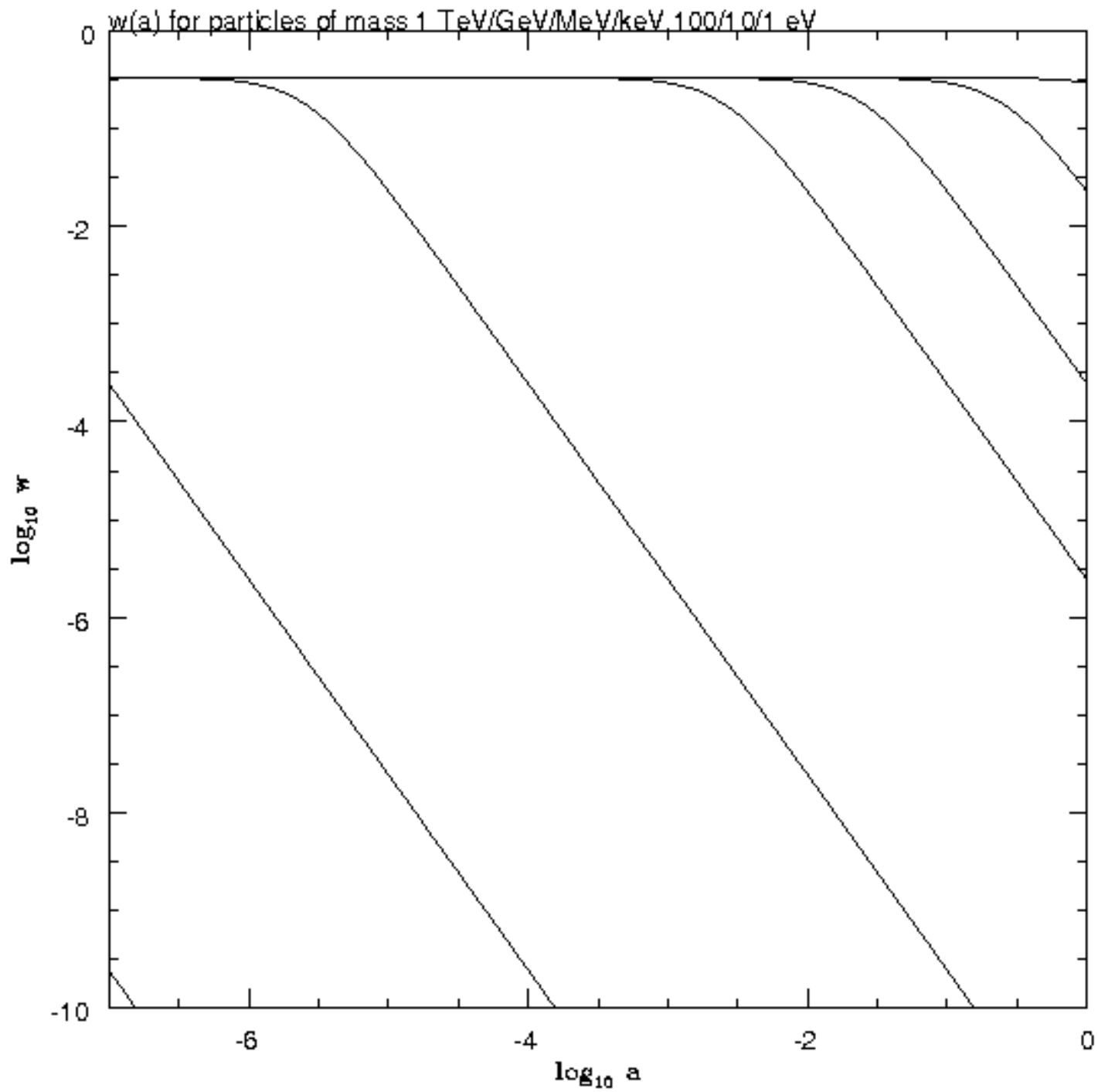


SDSS Galaxy Distribution



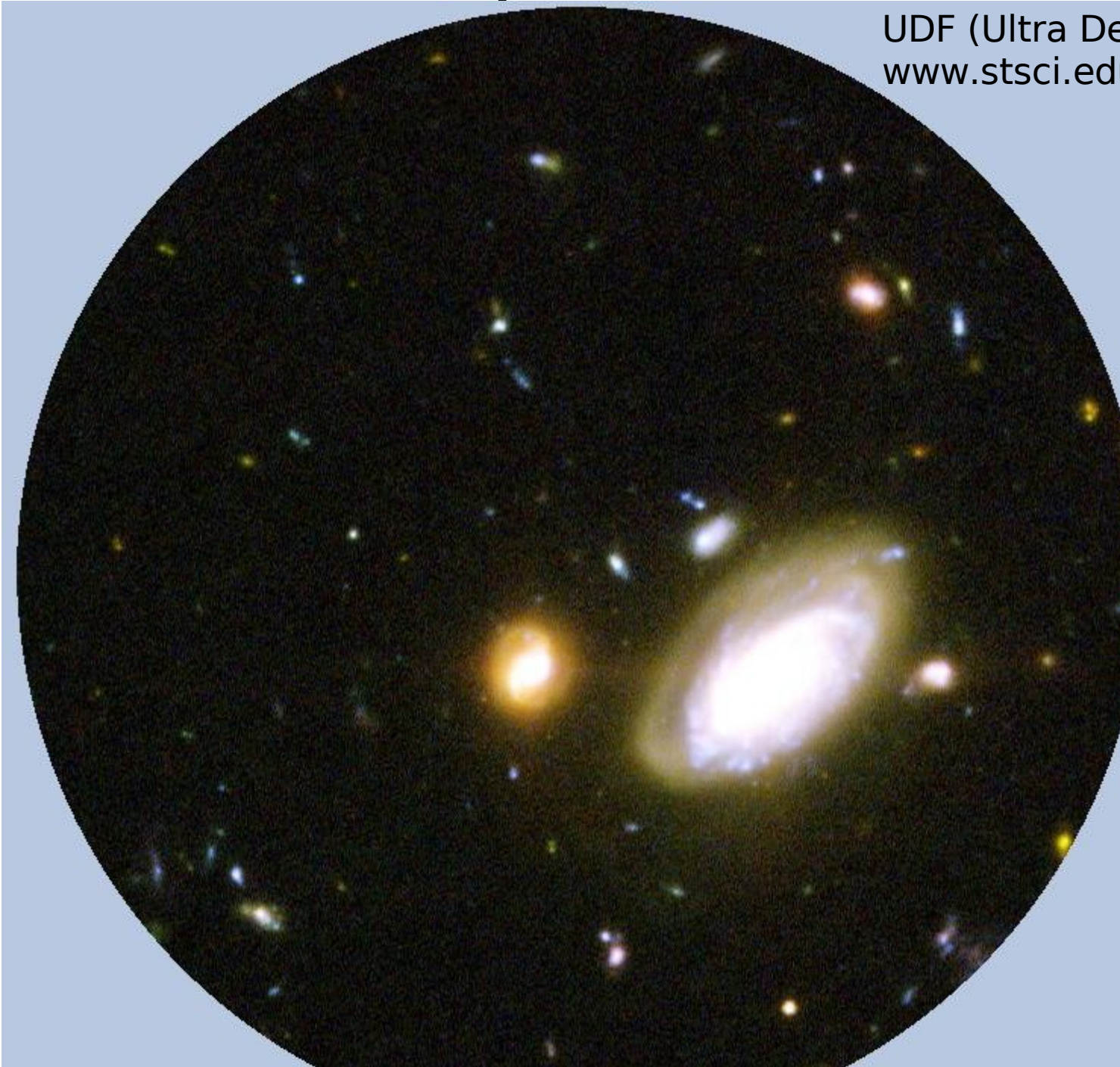
Gaussian Distros With Different Power Spectra



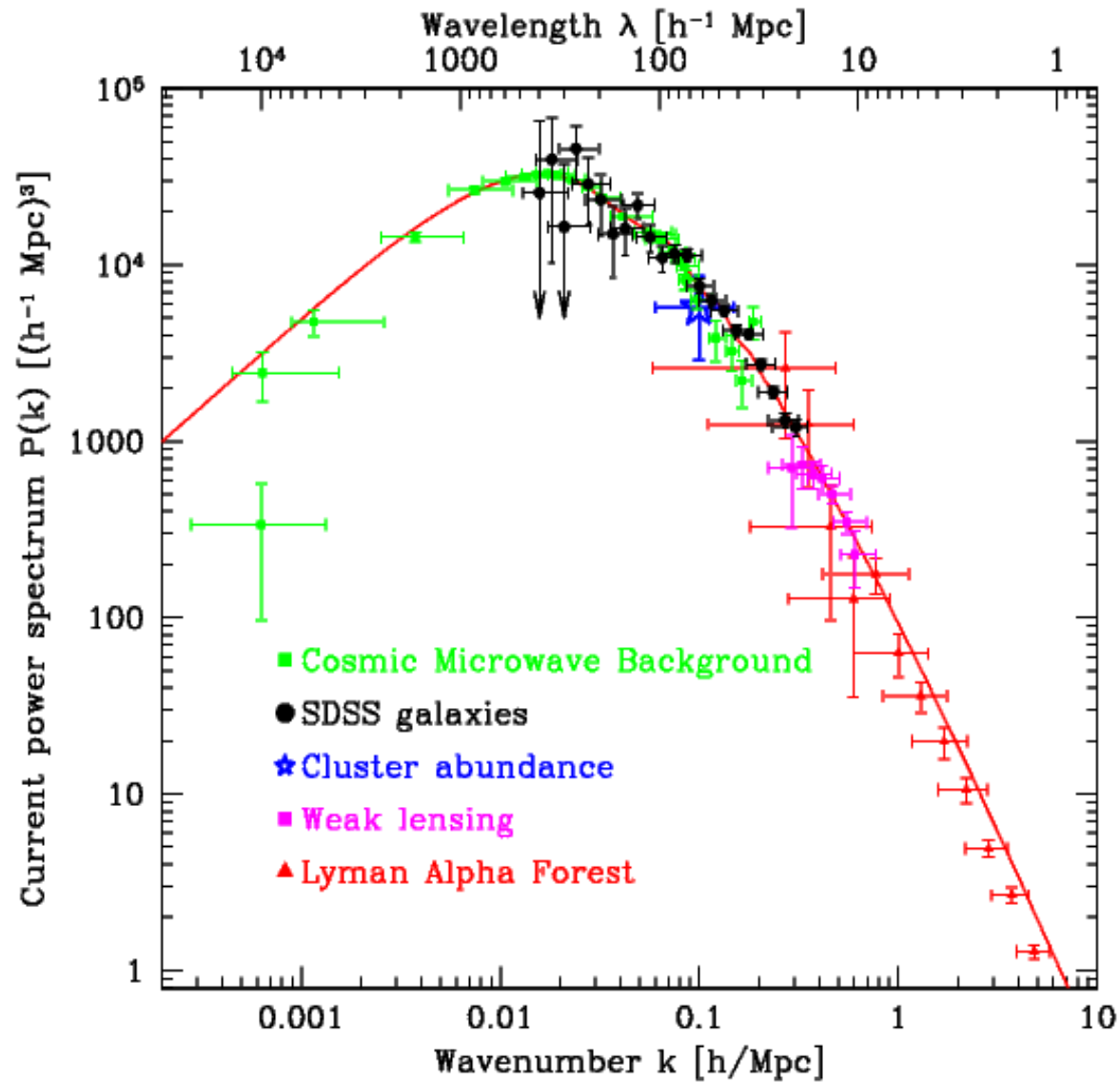


Bottom-up formation

UDF (Ultra Deep Field):
www.stsci.edu/hst/udf



SDSS Power Spectrum



Matter power spectrum: Tegmark et al 2004

Cosmic Shear Basics

