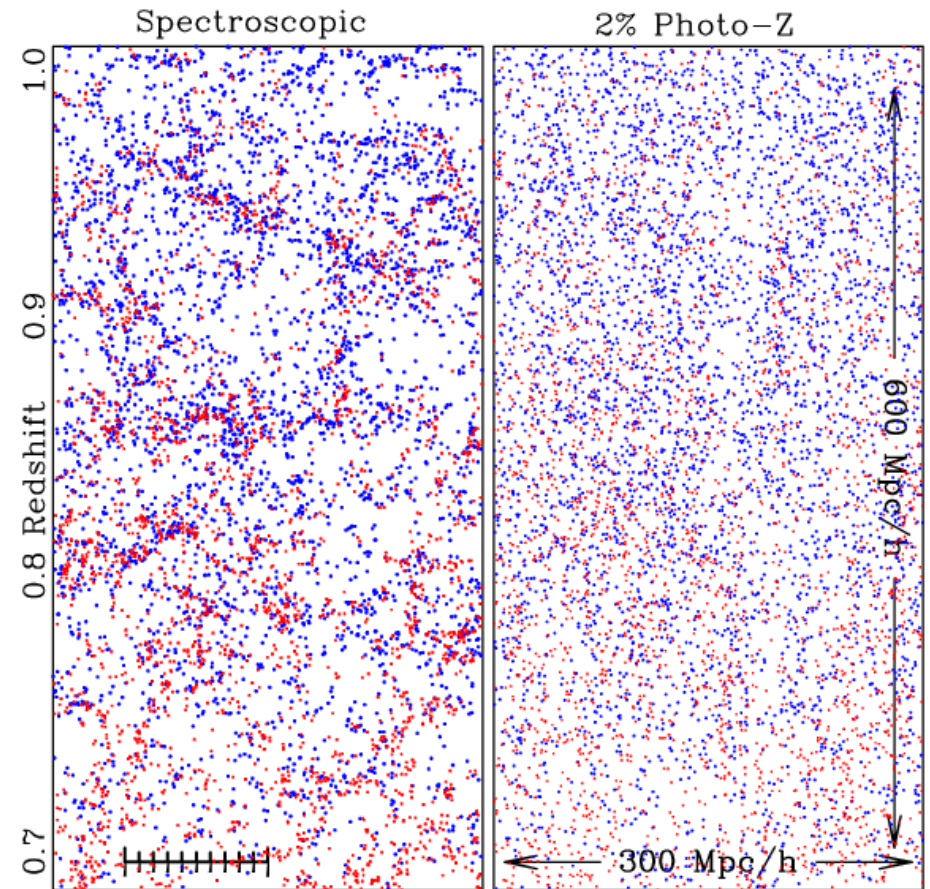


Seeing the Universe in 3-d

Daniel Eisenstein (Harvard)

- Large-Scale Structure (LSS) allows us to explore a wide range of cosmological physics.
- We see LSS in many useful ways, but spectroscopic redshifts are by far the cleanest way to reveal the cosmic web.
 - More linear theory modes.
 - Access to peculiar velocities, groups, voids.
 - More robust!
- As we plan beyond Rubin/CMB-S4, both our statistical goals and our systematic requirements drive us toward a 3-d view of the Universe.



A small patch of DESI data (40 Mpc/h thick) showing red and blue galaxies. Even good photo-z's badly blur out the cosmic web. 10 Mpc/h is one tick on the ruler.