

Photo-z's: goals & challenges

Boris Leistedt (NYU)

Personal opinion/thoughts, not
that of employer or colleagues!

sophisticated models & statistics



FOLLOW-UPS OF SPECIFIC OBJECTS, SPECIFIC POPULATIONS, ETC

Want: most precise photo-z's using interpretable physical model

No real need to be statistically calibrated

GALAXY FORMATION/EVOLUTION

Want: photo-z's + model to interpret them + $N(z,t,m)$ distributions

Challenges: mapping with physical/SPS models, statistically calibrated model+priors on redshift/luminosity/type abundance, etc

Less dependent on observed $N(z)$

FUNDAMENTAL LSS COSMOLOGY

Want: observed $N(z)$ with uncertainties for tomographic galaxy samples

Challenges: correct inference from redshift PDFs/flux likelihoods (thus statistically accurate PDFs) + combining with clustering information

Don't really care about underlying photo-z method