Weak Lensing

• Albrecht, Bartlett, Binétruy, Bradac, Burchat, Hirata, Linde, Marshall, Roodman
Instrumental

• Is lensing living up to its claimed potential?
  – Limited by imaging processing/modeling
  – Started with telescopes not designed for lensing
  – Some discussion on how to best design an optical system
    • New designs not tested – will we find other problems with new optical systems?
• Promise is highest
  – Instrument heavy on systematics
Astrophysical

– Intrinsic alignments
  • Don’t seem to be a show stopper, but can degrade constraints
– Theory and comparison to data
  • Need large N-body simulations for required accuracy
  • Baryonic effects
    – Cluster contraction: <~1%
    – Dark horse - missing baryons
  • Unknown astrophysical systematics...