

Cosmic Calibration

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ApJLetter 646, L1 (2006); PRD76, 083503 (2007)

Challenge:

Constrain ~ 20 cosmological parameters from different observations and simulations

→ 10^{20} simulations!

Have to find more efficient way!

Solution:

1. Simulation design
2. Emulation
3. Uncertainty and sensitivity analysis
4. Calibration
5. Prediction

Example: Synthetic Matter Power Spectrum

