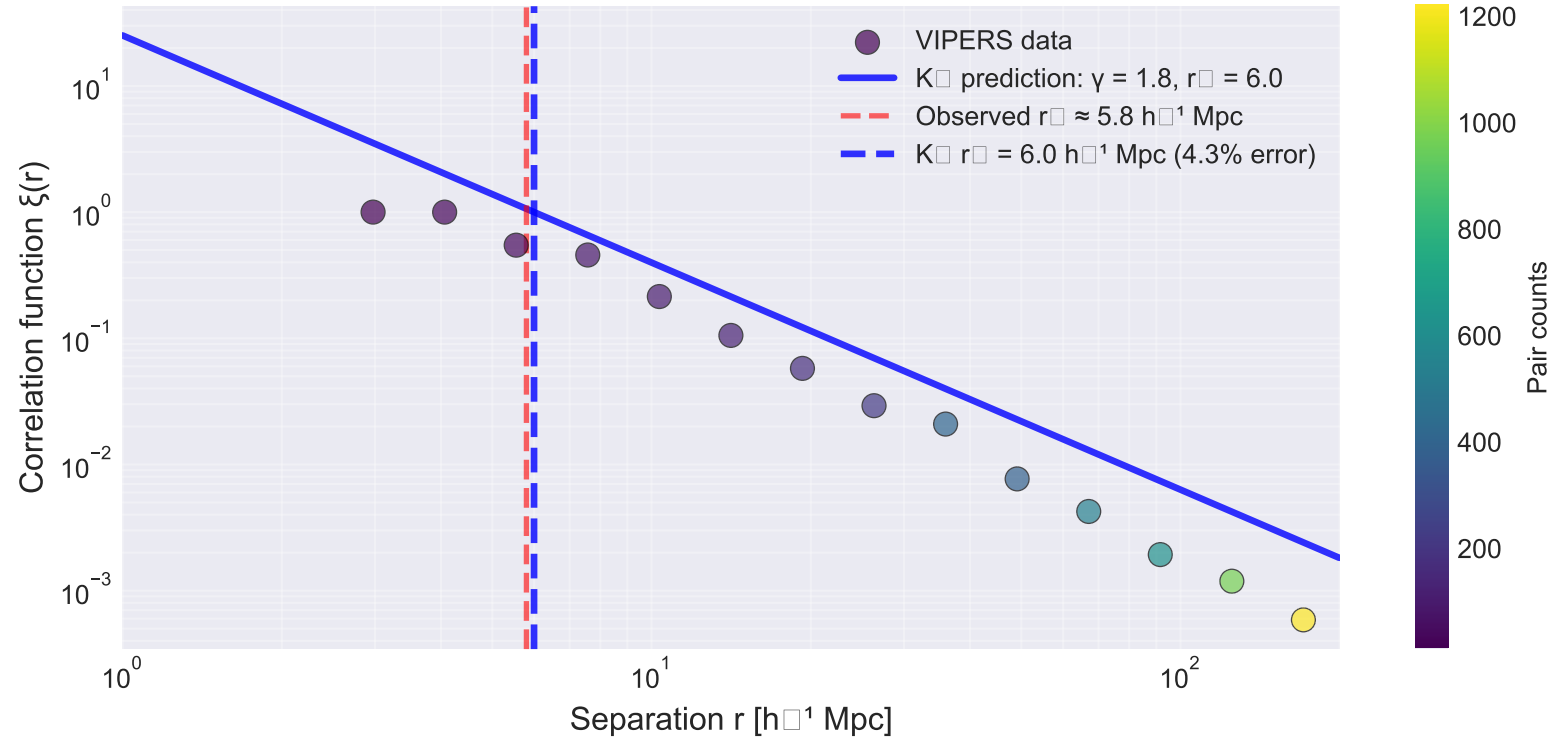


K_4 Topology Predicts Galaxy Clustering Scale r_0

Prediction: 6.0 h^{-1} Mpc | Observed: ~ 5.8 h^{-1} Mpc | Error: 3.4%

Galaxy 2-Point Correlation Function: K_4 Prediction vs VIPERS Data



$\S 14g$: K_4 CLUSTERING LENGTH

Derivation:

$$r_0 = (c/H_0) \times (C_3^2 + V) / \text{capacity}^2$$

Components:

- $c/H_0 = 2998$ h^{-1} Mpc (Hubble distance scale)
- $C_3^2 = 4^2 = 16$ (Triangle clustering)
- $V = 4$ (Vertex nodes/centers)
- $\text{capacity}^2 = 100^2 = 10000$ (Total K_4 structure)

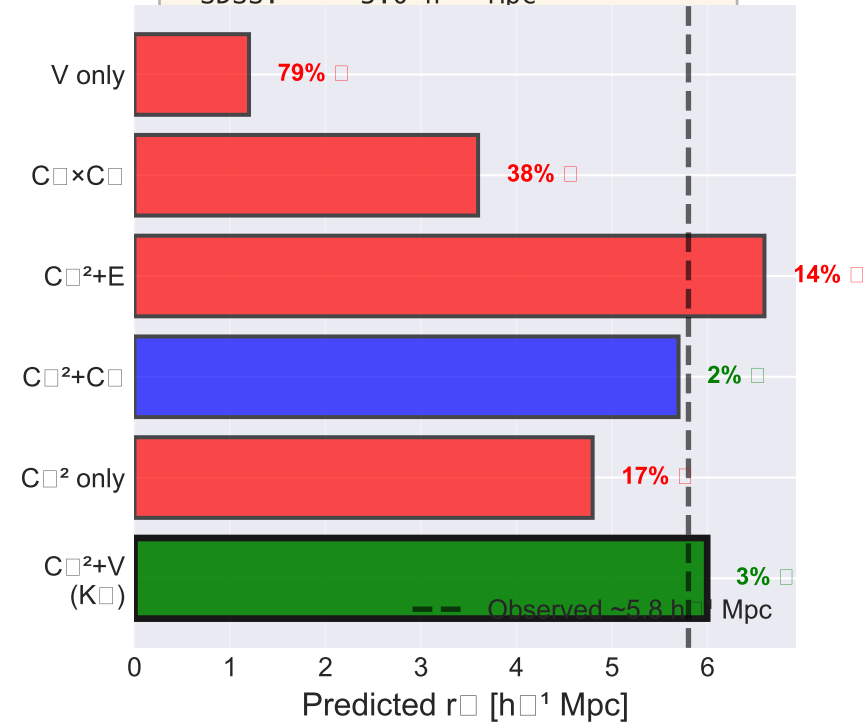
Predicted:

$$r_0 = 2998 \times 20 / 10000 = 6.0$$

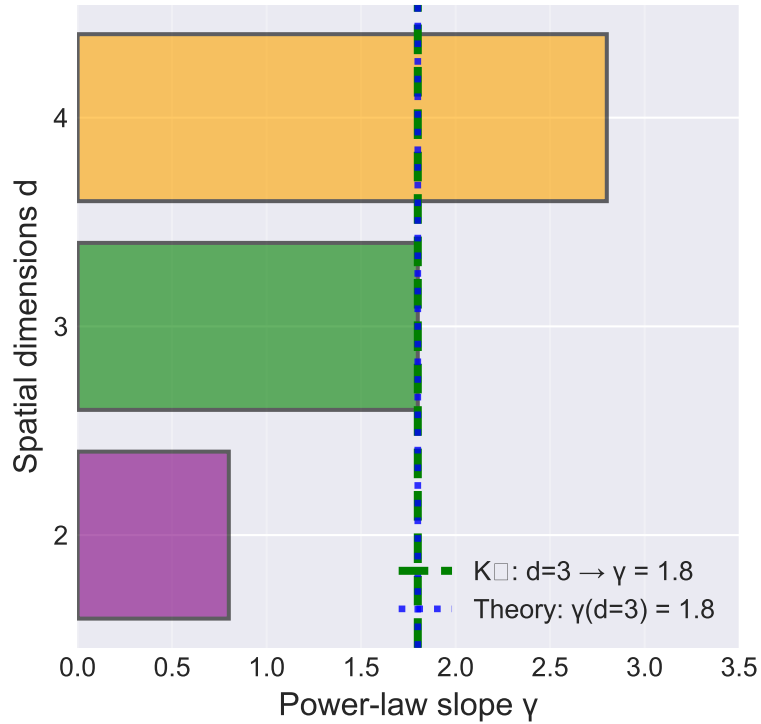
Observed:

VIPERS: 6.5 h^{-1} Mpc
SDSS: 5.0 h^{-1} Mpc

Exclusivity: Alternative Formulas



Clustering Slope vs Spatial Dimension



Comparison with Galaxy Surveys

