

Model $\Phi(\Omega|\theta)$: Model $\Phi(\Omega)_{BG}$: Background $\Sigma(\Omega, \Omega')_{ij}$: Covariance $\mathcal{E}(\Omega)$: Exposure**Fisher Information Matrix**

$$\mathcal{I}_{ij}(\theta)$$

Information Geometry

$$g_{ij} = \mathcal{I}_{ij}$$

Confidence contours \simeq constant geodesic distance contours**Effective counts method**

$$\mathcal{I}_{ij}(\theta) \rightarrow (s_i(\theta), b_i(\theta))$$

Discovery reach**Exclusion limits****Information Flux**

$$\mathcal{I}(\theta)_{ij} = \int dt \int d\Omega \frac{d\mathcal{E}(\Omega)}{dt} \mathcal{F}(\Omega)_{ij}$$

Experimental design