

**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**