

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

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

Effective counts

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

Exclusion limits**Discovery reach****Model likelihood****Information Geometry**

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

Confidence contours
 \simeq equal geodesic distance contours**Information Flux**

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

Experimental design