

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 equal geodesic distance contours**Information Flux** $\mathcal{I}(\theta)_{ij} = \int dt \int d\Omega \frac{d\mathcal{E}(\Omega)}{dt} \mathcal{F}(\Omega)_{ij}$ **Experimental design****Effective counts method** $\mathcal{I}_{ij}(\theta) \rightarrow (s_i(\theta), b_i(\theta))$ **Exclusion limits****Discovery reach**