Cosmological Parameters from SSSI: Prerequisites

SSSI

- **"Stage IV"**
    - **DESI + 4MOST: broadband multi-tracer RSD power spectra**
    - **LSST: angular clustering, galaxy clusters, WL, SN, strong lensing**

- **Precision Cosmology**
    - **Statistical power needs to be matched by systematics control**
    - **Overlapping surveys are not independent**

- **Baseline Forecasts**
    - **account for cross-covariance between overlapping surveys**
    - **~60 nuisance parameter (LSST), ~10/(spectroscopic survey)**
    - **open w_aCDM cosmology**
    - **Linearized modified gravity effects using (μ, Σ) parameterization**
    - **(CosmoLike implementation by Miyatake & Eifler)**