

## Stage 1

Unify catalogs and metadata:

- Consistent unit conversion e.g. with respect with solar masses, SI, cgs, ...
- Complete missing metadata, by using known universal relations.
- Unify ways of extracting GW strain. Sometimes data comes in different formats, e.g. JSON files, .hdf5, ...

WATPY

lal

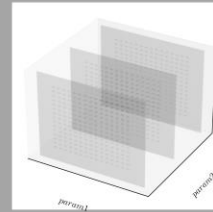
## Stage 2

Interface that handles template banks and detector PSDs

- Each analysis will require a triple:

[waveform, template model, and detector PSD]

Template model+ ND-parameter space



Detector noise curve

- KAGRA
- ALIGO
- VIRGO
- ET, CE 1&2
- custom

## Stage 3

Matched filtering

Stage 4.  
store results & unified metadata

JSON file

- Analysis\_0
- ...
- Analysis\_N