

SIMPLE

Statistical Inference with Multi
PLanet Exemplars

Design Goals

- Fast
- Accurate
- Extendable
- Written for public release
- PEP 8 style as much as feasible
- Doxygen Docfiles
- Doc Strings is numpy style

Initial Study:

- N_planet/star
- Mutual Inclination
- Eccentricity

Q1-Q16 Updated Stellar
Parameters File

Sampler

- -Grid
- MCMC or something fancier later

Model Specification

- Class?
- Individual Modules?
- Both?
- Numpy/Scipy stats

Model Verification
via post sampling
testing

Catalog Synth
Library

Catalog Synthesis **(Very Embarrassingly Parallel)**

- Compute Derived Planet Parameters
- Reject Implausible Planets
- Add Noise

Catalog Compilation?

Catalog
Verification
via testing sets

ABC Framework

Science!