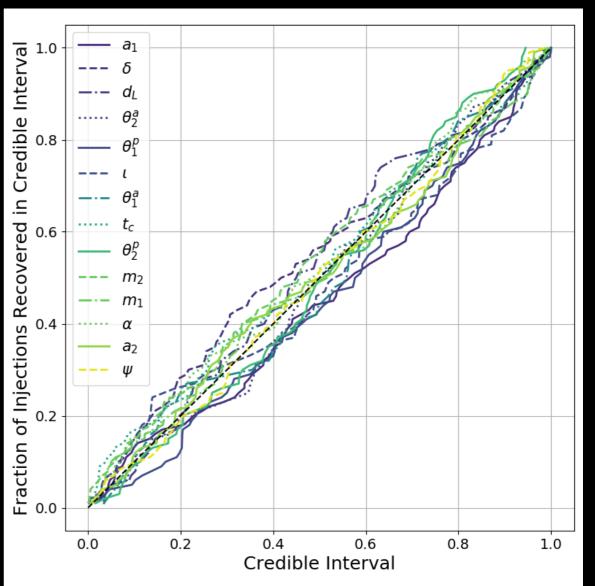
## PERCENTILE PERCENTILE TEST

- Add signals to realizations of Gaussian noise
- Run PE on each signal, produce marginal posteriors for each parameter
- Test: for each parameter, do X% of the injected values fall within the X% credible interval?

## emcee\_pt



Probability of obtaining this graph if emcee\_pt provides unbiased parameter estimates: 70% (pass)

## EMCEEPT SUGGESTED SETTINGS

- ▶ Have found the following to work ok for getting posterior for GWs:
  - ▶ 1000 walkers
  - 4 temperatures
  - burn in test: nacl & max\_posterior
  - model: marginalized\_phase

## **CAUTION:**

- Marginalized phase model will not work with waveforms with higher modes (i.e., IMRPhenomPv2: ok; IMRPhenomPHM: not ok). Need to use gaussian\_noise model
- These are not enough temperatures to get a good evidence estimate. (see Steven Reyes talk tomorrow)