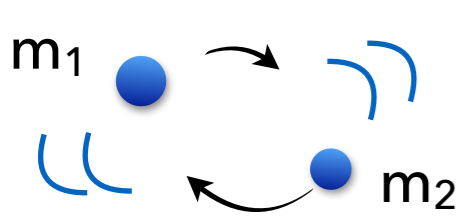


Quick example of frequency dependence of  
source parameters for ETD

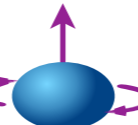
# Approximate frequency-domain waveform

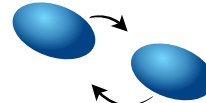


$$\tilde{h}(f) = \mathcal{A} e^{-i\Psi}$$

$$\Psi \supset a_0(\mathcal{M}) f^{-5/3}, \quad a_1(\mathcal{M}, \eta) f^{-1}, \quad a_{1.5}(\mathcal{M}, \eta, \beta) f^{-2/3},$$

$$a_2(\mathcal{M}, \eta, \sigma) f^{-1/3}, \quad a_5(\mathcal{M}, \eta, \tilde{\Lambda}) f^{5/3}$$

spin-spin:  $S_i^2$  () &  $S_1-S_2$

tidal: 

Fisher information on parameters:

involves integrals  $\sim \frac{|(\partial \tilde{h} / \partial \xi_i)|^2}{f S_n(f)}$

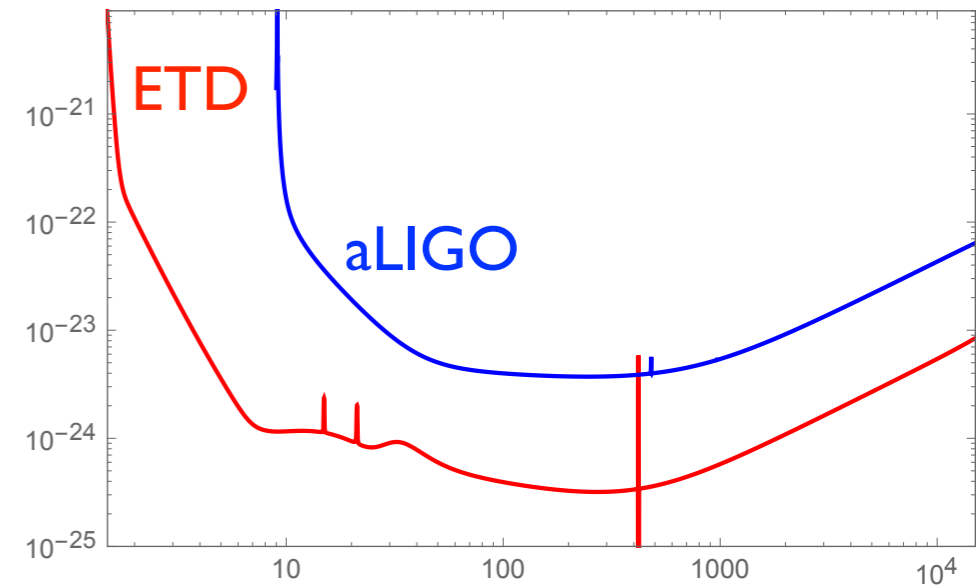
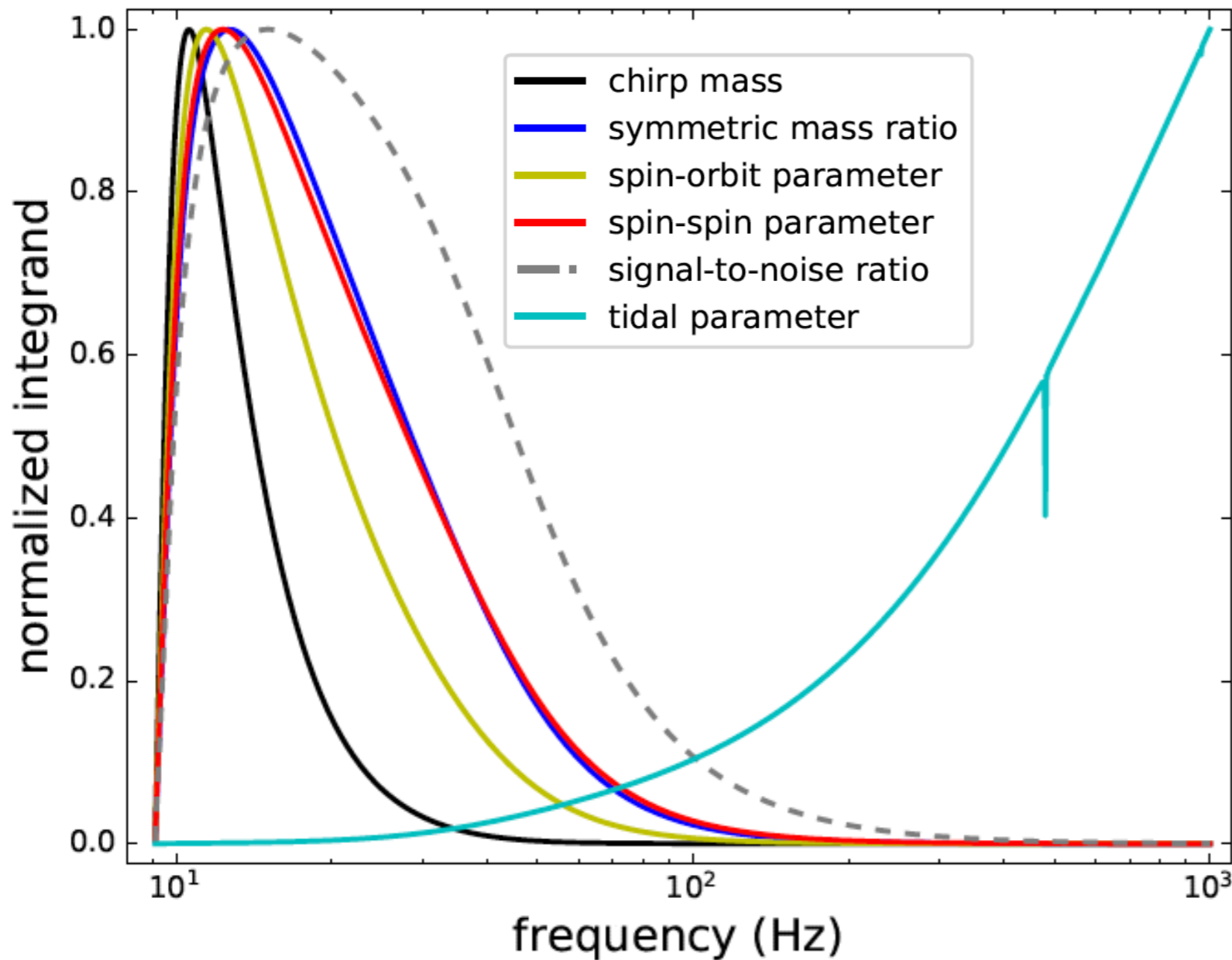
“integrand”

← detector PSD

$$\xi_i = (\mathcal{M}, \eta, \beta, \sigma, \tilde{\Lambda}) \quad (\text{in this estimate})$$

# Accumulation of info for aLIGO (ZeroDetHighP)

- “integrands”, each normalized
- fiducial neutron-star binary, equal masses, nonspinning



# How does it change for ET-D?

