$$\mathrm{BF}^{\mathrm{ES}}(\phi,\omega) = \lim \frac{\int J_{H_a} \prod_s P(\tau_s) d\tau_1 \cdots d\tau_S}{\int J_{H_0} \prod_s P(\tau_s) d\tau_1 \cdots d\tau_S} \tag{A.6}$$

$$\zeta^2 = \frac{1}{\sum_s (\delta_s^2 + \phi^2)^{-1}}, \tag{A.11}$$

Applying (A.14) results in

(A.22)

$$\mathrm{BF}^{\mathrm{ES}}(\phi,\omega) = \sqrt{\frac{\zeta^2}{\zeta^2+\omega^2}} \exp\left(\frac{\mathcal{T}_{\mathrm{ES}}^2}{2}\frac{\omega^2}{\zeta^2+\omega^2}\right) \cdot \prod_s \left(\sqrt{\frac{\delta_s^2}{\delta_s^2+\phi^2}} \exp\left(\frac{T_s^2}{2}\frac{\phi^2}{\delta_s^2+\phi^2}\right)\right)$$