1. Parameters

$$\vec{\lambda} = \{ M_c, \eta, t_0, \log d_L, \text{R.A.}, \sin \text{Dec}, \cos i, \phi_c, \psi, a_{\text{spin}_1}, \cos \theta_1, \phi_1, a_{\text{spin}_2}, \cos \theta_2, \phi_2 \}, (1)$$

$$\vec{\lambda} = \{ M_c, \eta, t_c, \log d_L, a_{\text{spin}}, \kappa, \text{R.A.}, \sin \text{Dec}, \phi_c, \sin \theta_{J_0}, \phi_{J_0}, \alpha_c \},$$
(2)