Mass transfer stability $(\zeta_{eff}, q_{\text{crit},2}), \ \mathcal{R}_{0.2}$ 10^{2} Possible location rise in GW - data(Farah et al. 2021) (3.5, 3.03), 0.9(4.5, 3.55), 4.6(5.5, 4.06), 16.7-1 M_{\odot}^{-1} 10^{1} (6.0, 4.32), 25.3(6.5, 4.58), 35.9 $\frac{d\mathcal{R}}{dM_{\text{chirp}}} \left[\text{Gpc}^{-3} \text{yr} \right]$ NS Format 10^{0} 7.5 12.5 2.5 10.0 15.0 5.0 Chirp Mass, $M_{\rm chirp}$ [M $_{\odot}$]