Local merging BH-BH rate Rate $[\mathrm{Gpc}^{-3}\,\mathrm{yr}^{-1}]$ 10^{-2} 10^{-3} 10^3 10^{-1} 10^0 10^{1} 10^2 10^4 10^5 Gravitational waves GWTC-2, redshift independent model, Abbott et al. (2020f) GWTC-2, redshift dependent model, Abbott et al. (2020f) GWTC-2, 'truncated' model, Abbott et al. (2020f) GWTC-2, including GW190814, Abbott et al. (2020f) Isolated binary evolution O'Shaughnessy et al. (2010) Mennekens and Vanbeveren (2014) de Mink and Belczynski (2015) 🌗 Dominik et al. (2015) Lamberts et al. (2016) Lipunov et al. (2017)

Mapelli et al. (2017) Chruslinska et al. (2018) Giacobbo and Mapelli (2018) Klencki et al. (2018) Kruckow et al. (2018) Mapelli and Giacobbo (2018) Artale et al. (2019) Baibhav et al. (2019) Chruslinska et al. (2019) Èldridge et al. (2019) Neijssel et al. (2019) Spera et al. (2019) Belczynski et al. (2020) Giacobbo and Mapelli (2020) Mapelli et al. (2020) Riley et al. (2020) Roman-Garza et al. (2020) Santoliquido et al. (2020) Tang et al. (2020) Zevin et al. (2020) Bavera et al. (2021) Ghodla et al. (2021) Olejak et àl. (2021) Santoliquido et al. (2021) Chemically homogeneous evolution Mandel and de Mink (2016) Marchant et al. (2016) Riley et al. (2020) du Buisson et al. (2020) Population III stars Kinugawa et al. (2014) Belczynski et al. (2017) Hijikawa et al. (2021) Kinugawa et al. (2021) 🖡 Tanikawa et al. (2021) **Triples** Silsbee and Tremaine (2017) Antonini et al. (2017) Rodriguez and Antonini (2018) Martinez et al. (2020) Globular clusters Bae et al. (2014) (Rodriguez et al. (2015) Antonini and Rasio (2016) Rodriguez et al. (2016) Askar et al. (2017) Fujii et al. (2017) Park et al. (2017) Fragione and Kocsis (2018) Hong et al. (2018) ♣ Rodriguez and Loeb (2018) ♣ Choksi et al. (2019)Antonini and Gieles (2020) Kremer et al. (2020) Mapelli et al. (2020) Nuclear star clusters Miller and Lauburg (2009) \rightarrow Antonini and Perets (2012) Antonini and Rasio (2016) Bartos et al. (2017) Petrovich and Antonini et al. (2017) Stone et al. (2017) → Hamers et al. (2018) Hoang et al. (2018) • Rasskazov and Kocsis (2019) Stephan et al. (2019) Mapelli et al. (2020) **♦** Tagawa et al. (2020) Wang et al. (2020)Yang et al. (2020) Young/Open stellar clusters Ziosi et al. (2014) Mapelli et al. (2016) Rastello et al. (2019) Di Carlo et al. (2020) Kumamoto et al. (2020) ▮ Mapelli et al. (2020) Santoliquido et al. (2020) Banerjee (2021) Primordia Bird et al. (2016) Ali-Haïmoud et al. (2018) Raidal et al. (2019) 10^{-1} 10^2 10^3 10^0 10^4 10^{-2} 10^5 Rate $[\mathrm{Gpc}^{-3}\,\mathrm{yr}^{-1}]$