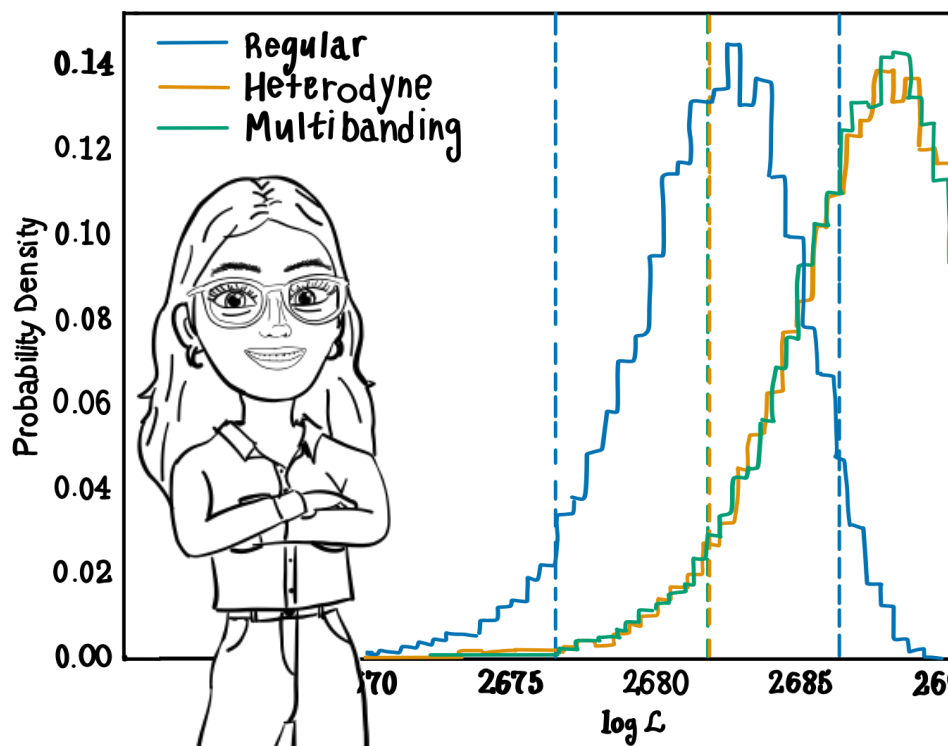
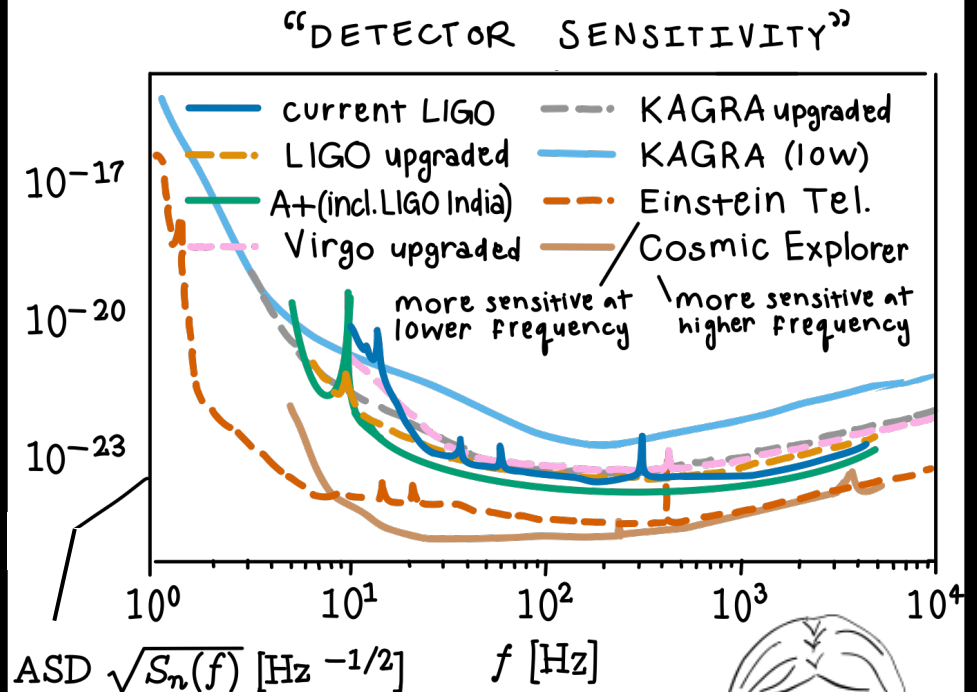


3 different* likelihood sampling codes...

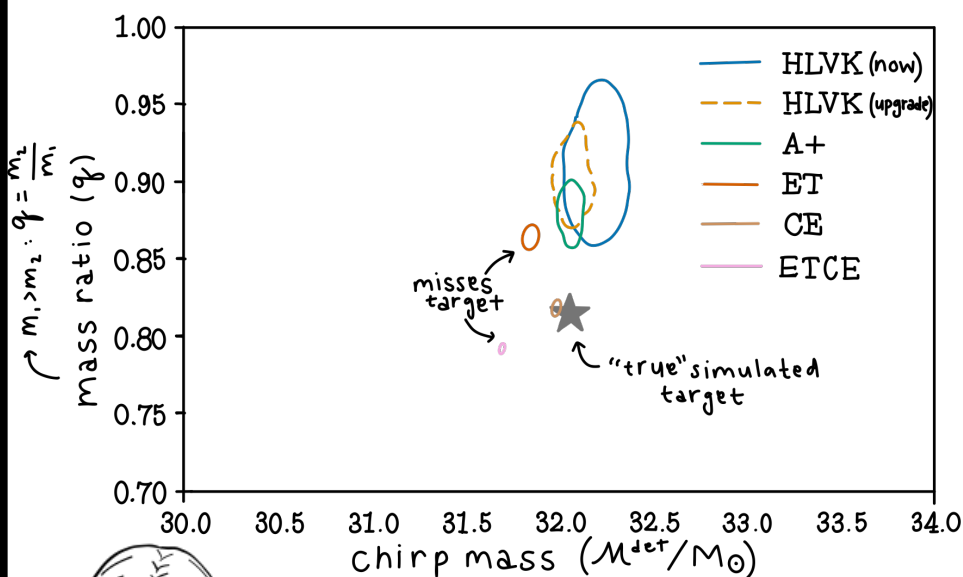


*Heterodyne and Multibanding chop up the signal at early frequencies to save computing time!

& 6 combinations of detector networks at increasing sensitivity!



While the rest of the simulations are completed, preliminary results show that the new waveform and likelihood models still do **not** accurately recover the simulated target at next-generation detector sensitivities.



Function of masses of 2 orbiting bodies related to the rate of energy radiated away through GWs

$$\mathcal{M} = \frac{(m_1 m_2)^{3/5}}{(m_1 + m_2)^{1/5}}$$

Ex: IMRPhenomXPHM
(Equal-Mass,
Regular Likelihood)

If we rely on today's gravitational waveform models with tomorrow's powerful detectors, we might misread the story of gravity or even the objects that create GWs.

To uncover the true details, we must improve our tools—NR must keep evolving to keep our science accurate and unbiased!