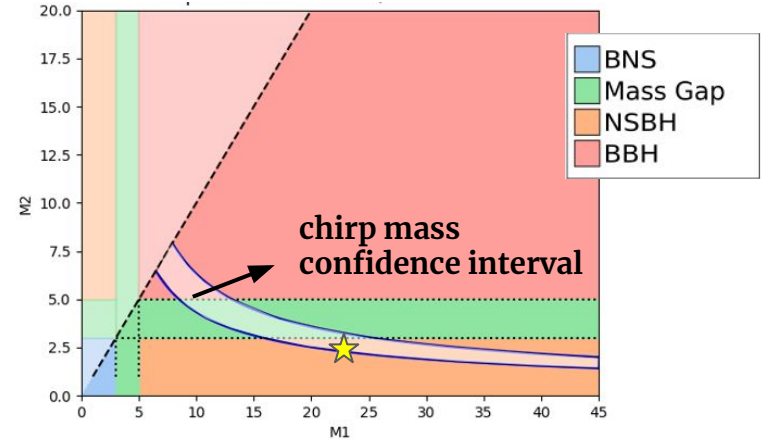


Rapid Online Estimation of Astrophysical Source Category and Compact Binary Parameters

V. Villa-Ortega, T. Dent and A. Curiel

- Rapid Source Classification is important for sending **follow-up alerts** of electromagnetic or other counterpart signals
- We estimate source probabilities using trigger **chirp masses** and **effective distances** from PyCBC Live.
- We present results for simulated signals, and for **O3 confirmed events** identified in low latency.

Estimated probabilities for GW190814



| Our method | 1st Public Alert | GWTC-2 |
|-------------------------|------------------|-----------|
| 31% MG 52% NSBH 17% BBH | 100% MassGap | 100% NSBH |