



Low/High frequency - Network size trade off

Salvatore Vitale's personal view subject to updates

MIT



Color code

- Blue: concerning black holes Magenta: concerning neutron stars Green: concerning CWs Yellow: concerning stochastic.
 Orange: bursts Dashed: the unexpected
- Some boxes are red and blue meaning that any combination of NS and/or BH is relevant.

CO



Caveats

- This plot should be taken as an indication of what science topics rely on which frequency and the number of detectors
- It is not meant to be rigorous (at least in this version)
- It's something I put together to show clearly how the answer to "what's the optimal network configuration" strongly depends on the scientific question one is trying to answer
- I will try to keep this to date and improve it with suggestions I receive
- You are welcome to use this diagram, just please kindly credit it

LIGO



Better low-frequency

Better bucket

Better high-frequency