Discussion
knowledge transfer to LISA

Workshop Data analysis challenges for stochastic
gravitational wave backgrounds

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Knowledge transfer to LISA

▸ Direct informations: multi-bands GW observations: prediction on sources, in particular SGWB

- PTA: MBHBs: high end of mass function
  => prediction of MBHB rate in LISA; some first studies are predicting sometime very high rate ($>10^4$ per years) …

- PTA: if cosmological SGWB, PTA and LISA could see the same signal (ex: cosmic strings, …) …

- Ground based GW Observatories: stellar mass BHBs
  => prediction of the background for LISA

- Maybe more indirect prediction via the modelling?

- Anything else?

Knowledge transfer to LISA

▸ Methods:

- **Common technics** with Ground Based:
  - Glitch removal,
  - Anisotropy search,
  - Share statistical tools,
  - BUT no much in common on SGWB (no direct cross-correlation with LISA); more for deterministic sources.

- Importance of **monitoring the environment**

- PTA is a bit similar to GBs: **stochastic + resolvable**, but much lower in SNR, common technics

- PTA importance of **modelling the noise**: major part of the PTA data analysis activities; it will be important in LISA too

- ...