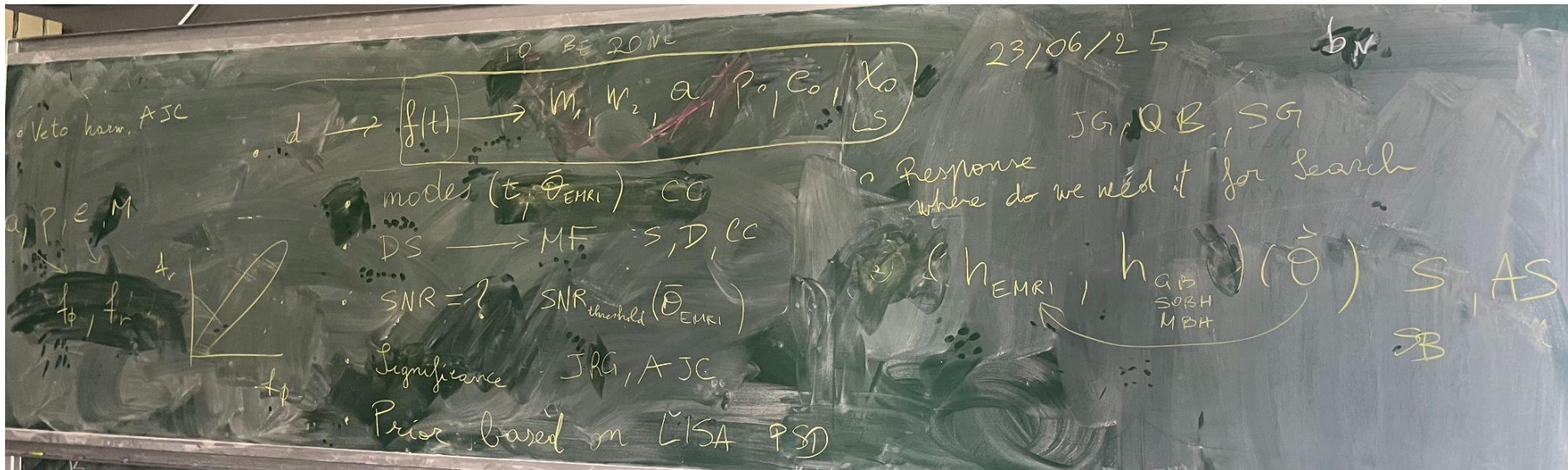


"EMRIs in the Global fit"

Lorenzo Speri & Diganta Bandopadhyay

You thought I would forget...



What was said:

- Data to frequency to parameters [arXiv:2510.20891](https://arxiv.org/abs/2510.20891)
- Mode content as function of time and parameters
- Detection Statistic to Matched Filtering (semi-coherent to fully coherent)
- SNR mapping of the parameter space
- Significance quantification for search
- Response for EMRIs, where do we need it for search
- Veto harmonics
- $(h_{\{EMRI\}}|h_{\{GB\}})$ [arXiv:2509.20062v2](https://arxiv.org/abs/2509.20062v2)

Discussion points

- "Inserting EMRIs" into the global fit:
 - Detection/significance: What is a good significance estimator? Which parameter space do we guarantee?
 - Parameter estimation: optimal number of modes for fast PE
 - Multimessenger: QPEs, TDEs, other transients
 - Can global fit output something to make post-processing easier for the beyond vacuum GR folk? Is there some (compact) data product which would be useful?
- Quiet/Non-plunging EMRIs:
 - Mojito Heavy ~ 100 EMRIs, what do we do with the undetectable ones?
 - Does it make sense to include an EMRI in the global fit if the SNR is 30 but $e=0.9999$? Even if we can't search for it (in the near future)?

Future directions: the new black board

Time Capsule with EMRI resonance will be opened in 2050

