

# GravNet

- thoughts on synchronisation -

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- Analysis strategy

- Combination of frequency domain results

- Time-Domain combination

- No information on directionality
- Extracting source direction

- Phase aligned combination of RF (IF) signals

- Single Photon Counting

- Requirements

- Milli-seconds time-stamping

- time-stamping, 3ms resolution (dist. LNF - Mainz: 1000km)

- < ms: ~ 100  $\mu$ s

- Phase synchronised RF (IF) clocks

- Exact frequency match of cavities

- Seems impractical over large distances!

- Minimum readout window: ~10 $\mu$ s