

Proposed multi-messenger observation of Sco X-1 with RXTE and gravitational wave detectors

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LIGO-VIRGO - RXTE Coincident analysis

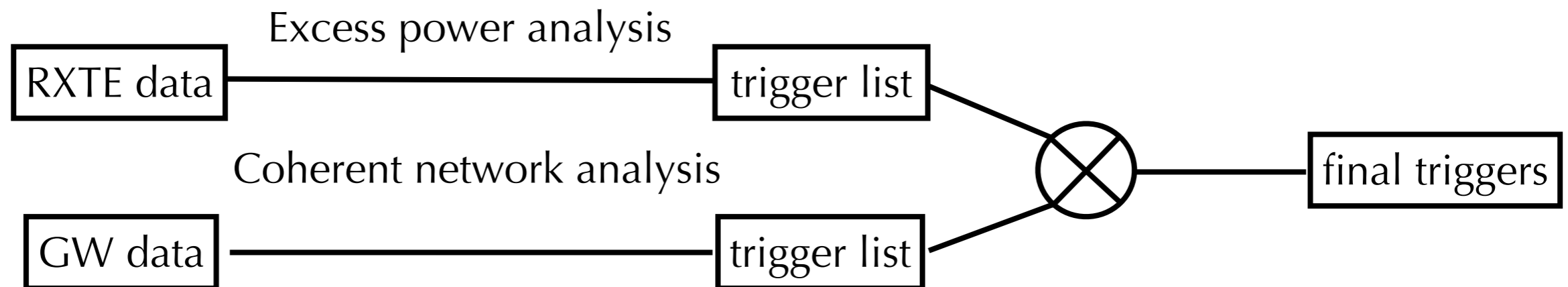
MOU: RXTE team and LIGO-VIRGO

Motivation:

Mechanisms that generate GW bursts \longrightarrow X-ray, gamma-ray
Simultaneous detection of photons and GWs.

Method:

- J. Marcowitz, E. Katsavounidis, G. Jernigan et al. developed cross-correlation method.
studied statistics of correlation with RXTE and LIGOS5
- Coincidence method



Expectation:

- Low false alarm rate by directional search
- Set upper limit on GW coincidence with X-ray emission
- We hope serendipity that we find a new X-ray event with new tools in X-ray astronomy.