GWPAW 2017

Gravitational Wave
Physics and Astronomy
Workshop

May 30th - June 2nd
Annecy, France

ID de Contribution: **14**   Type: **Poster**

Fast localization with a hierarchical network of gravitational wave detectors

mercredi 31 mai 2017 16:38 (4 minutes)

We present expected fast sky localisation of coalescing binaries with a hierarchical search using three gravitational wave (GW) detectors, HLV (Hanford/Livingston/Virgo).

A hierarchical search can be used with different sensitivity GW detectors, and is aimed at making effective use of the least sensitive detector's information. In the hierarchical network, the less sensitive detectors are included into the network with a lower SNR threshold than the higher sensitivity detectors, only when a co-incidence trigger is detected by the sub network of higher sensitivity detectors.

Here we demonstrated the sky localisation using a hierarchical search using the two higher sensitivity LIGO detectors and the less sensitive Virgo detector, using simulated signals.

Auteur principal: M. FUJII, Yoshinori (U. of Tokyo / National Astronomical Observatory of Japan)

Co-auteurs: MARION, Frédérique (LAPP); Dr FLAMINIO, Raffaele (LMA); Dr ADAMS, thomas (LAPP)

Orateur: M. FUJII, Yoshinori (U. of Tokyo / National Astronomical Observatory of Japan)

Classification de Session: Posters