GCN capabilities and status, and the incorporation of LIGO/Virgo

SCOTT BARTHELMY, GSFC,LSC — The Gamma-ray Coordinates Network / Transient Astronomy Network (GCN/TAN) is a single-point source for all transient astronomy notification. It collects the astrophysical transients from the missions (space-based and nearly all ground-based), puts them into a standard format, and distributes them to whomever wants to receive them. This is all done autonomously (completely autonomous within GCN/TAN, and almost always autonomously within the producer end of operations). This automation means minimal time delays (<0.1 sec within GCN for VOEvent and binary socket-based distribution methods, and typically a few sec for email-based which is dependent on the internet email protocol and the number of hops, both of which are out of the control of GCN/TAN). The LIGO-VIRGO Collaboration (LVC) Notices are now implemented in the GCN/TAN system. During the proprietary phase, the recipients must have an MoU with LVC and LVC must authorize GCN to distribute LVC Notices to each given MoU follow-up observer. In addition to Notices, there are the GCN Circulars, which are prose-style reports of follow-up observations made and results obtained. During the LVC Proprietary phase there are also the GCN LVC Circulars, which also require authorization from LVC to join the LVC Circulars.

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