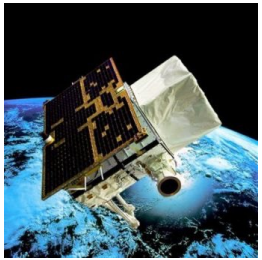

INAF OAS BOLOGNA

The AGILE real-time analysis pipelines in the multi-messenger era

N. Parmiggiani, A. Bulgarelli, A. Ursi, V. Fioretti, L. Baroncelli, A. Addis, A. Di Piano, C. Pittori, F. Verrecchia, F. Lucarelli, M. Tavani, D. Beneventano

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AGILE and the multi-messenger context

- AGILE space mission:
  - launched by the Italian Space Agency (ASI) on 23rd Apr 2007
  - two main instruments for the gamma-ray detection: MiniCalorimeter (MCAL) and Gamma-Ray Imaging Detector (GRID)

- The AGILE data are sent from the ASI Space Data Center to the INAF/OAS Bologna data center for automated scientific analysis.

- In the multi-messenger context the observatories share information through communication networks (e.g. the GCN and ATel) about transient events.

- The AGILE automated pipelines are developed to detect transient events in the AGILE data and to perform the follow-up of external science alerts received by other facilities.

The AGILE real-time pipelines

- The system sends automated notifications to the AGILE Team and the GCN network when a transient event is detected.