

Celebrating 20 years of Swift Discoveries



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Astro-COLIBRI

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Observations of transient phenomena, such as GRBs, FRBs, novae/supernovae explosions, coupled with the detection of cosmic messengers like high-energy neutrinos and gravitational waves, have transformed astrophysics. Maximizing the discovery potential necessitates tools for swiftly acquiring an overview of the most relevant information for each new detection. Introducing Astro-COLIBRI, a comprehensive platform designed to meet this challenge.

Astro-COLIBRI features a public API, real-time databases, alert systems, discussion forums, and iOS/Android apps as well as a web-app as user clients. In real time, it evaluates incoming astronomical observation messages from all (!) available alert streams, filters them based on user-defined criteria, and contextualizes them in the multi-wavelength (MWL) and multi-messenger (MM) context. User clients offer a graphical representation, providing a succinct summary for quick identification of interesting phenomena, assessing observing conditions globally, and more. They make use of Swift resources to allow the timely creation of lightcurves of GRBs in context of archival data.

This (poster) contribution presents the key features of Astro-COLIBRI, outlining its architecture, summarizing data resources, and show-casing some exemplary use-cases.

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