

Celebrating 20 years of Swift Discoveries



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Gamma-ray burst progenitors revisited

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In the past few years, observations spearheaded and enabled by Swift have seen a re-writing of the story of gamma-ray burst (GRB) progenitors. It is now apparent that the observational dichotomy between long- and short-GRBs does not map cleanly to two distinct progenitor channels – massive stars and merging compact objects. Instead, growing evidence suggests that a small minority of short-GRBs can arise from massive stars, and a potentially significant number of long-GRBs may arise from mergers. At the same time, new capabilities for finding GRB-like objects outside of the gamma-ray regime in wide-field X-ray or even optical surveys offer the possibility of further stretching the physical systems creating relativistic, GRB-like outflows. I will provide an overview of the observational evidence that has been built for this new, more diverse view of the transient high-energy sky and consider how this landscape may become richer still in the coming years.

Primary author: LEVAN, Andrew (Radboud University)

Presenter: LEVAN, Andrew (Radboud University)

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