

# **A Comprehensive Study of High-Energy Data of Gamma-Ray Bursts: from Swift to Fermi**

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Swift and Fermi have propelled the study of GRB physics into an exciting new era. I will briefly introduce our recent works based on the the keV to GeV GRB data from the two instruments. The key questions I will address are (1) What are the physical explanations of the GRB X-ray light afterglows? (2) What are the the fundamental spectral components of GRBs and what are their physical origins? I will also show some recent surprising GRBs, which include a "double GRB", two "super-long" (up to 3 hours!) GRBs and a high-luminosity supernova GRB, and discuss their implications to the central engine of Gamma-Ray Bursts.