

GRBs from *Swift*'s early discoveries of x-ray afterglows following short bursts, coupled with extensive ground-based radio and visible-light data. Naturally, the models that seemed to work well in the days of *BeppoSAX* have not held up in the face of richer, more modern datasets obtained from *Swift* and ground-based observatories. The authors compare the first three years of *Swift*'s multiwavelength observations with various models for both long and short bursts, and they examine in detail the arguments for and against possible progenitors for each type of burst. Even though *Swift* has observed more than 200 additional bursts since the book went to print, the theoretical picture has not become any clearer. Virtually every issue raised by the authors that was a problem at the end of 2007 continues to be a subject of active research.

In their final chapter, the authors discuss newer generations of instrumentation, such as NASA's recently launched *Fermi Gamma-ray Space Telescope*, and observations that exploit GRBs as probes of the early universe. The possible use of GRBs as "standard candles" indicates that we may someday be able to extend our knowledge of the cosmic distance ladder to the earliest days of star formation. The book also explains how GRB studies may benefit from future observations of ultrahigh-energy cosmic rays, neutrinos, and gravitational radiation.

*Gamma-Ray Bursts* is an important and valuable book for any researcher in the GRB field or in related fields that can be illuminated by GRB results. Vedrenne and Atteia have written a brilliant synthesis of many years of research by hundreds of international scientists, and they don't shy away from explaining the scientific missteps along the way. It is a tale that illustrates the scientific process at its best.

**Lynn Cominsky**

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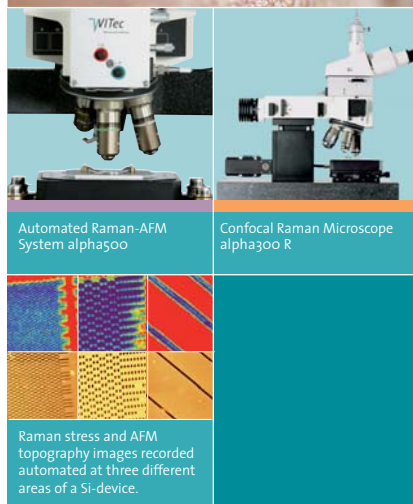
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