

*Expected Launch:
September 2003*

SWIFT

<http://swift.gsfc.nasa.gov/>

Swift

Kit Item

Spin-A-Spectrum Teacher's Guide

Mission

Swift will detect and accurately position gamma-ray bursts -- the most energetic events seen in today's Universe. The satellite will carry a complement of three co-aligned detectors that will enable scientists to detect and get accurate positions for these mysterious gamma-ray bursts, which disappear within seconds, never to appear in the same spot again. A "swift" response is therefore the only way to track down these elusive bursts, hundreds of which will be observed. When a burst is not being monitored, Swift will conduct the most sensitive gamma-ray survey of the sky ever made, leading to the expected discovery of hundreds of super-massive black holes at the cores of distant galaxies. Swift is an international collaboration between NASA and space agencies in the U.K., Italy and France.

Education and Public Outreach Program

The goal of the Swift EPO program is to use the observations and scientific discoveries of the Swift mission to improve the understanding and utilization of science and mathematics concepts for grades 7-12. There are four major components within the Swift EPO program which combine synergistically: web-based materials, printed curriculum materials - a GEMS guide and more, "What's In The News?" public television broadcasts, and educator training, including Swift workshops and conferences.

EPO site: <http://swift.gsfc.nasa.gov/epo/>

Seeing and Exploring the Universe

Every day there is a bright flash of gamma rays from a random point on the sky that can last from a few milliseconds to a few minutes, and then is never seen again. These events are among the most puzzling and intriguing astronomical phenomena found in modern times. Only recently have we begun to understand in some small part the true nature of these most energetic and relativistic events since the Big Bang. The time has come for us to fully reveal their nature, and to use them as a unique probe into our Universe and into the physics of matter and energy. Swift is a mission dedicated to unraveling the mystery of cosmic gamma-ray bursts.

