

Abstract Submitted  
for the APR05 Meeting of  
The American Physical Society

**Swift/BAT Instrument Performance and Status** JAY CUMMINGS,  
NRC/GSFC, SWIFT/BAT INSTRUMENT TEAM — The Burst Alert Telescope (BAT) is one of three telescopes aboard the Swift Gamma-Ray Burst Explorer that was launched on November 20, 2004. Swift's primary purpose is to identify and localize astronomical gamma-ray bursts and study their X-ray, UV and optical afterglow emission within seconds of the burst trigger. BAT provides the initial burst positions, as well as gamma-ray light curves and spectra within a 15-150 keV band. BAT is a coded aperture imaging telescope with a wide ( $\sim 2$  sr) field of view consisting of a large coded mask located 1 m above a  $5200 \text{ cm}^2$  array of 32,768 CZT detectors. As of the time of this abstract submission, BAT has detected and located onboard 9 bursts. In addition, some faint bursts that were not imaged with sufficient significance onboard have been found in the ground analysis. BAT triggered and imaged outbursts of known sources as well, and will, when automatic slews are enabled, automatically request spacecraft slews to sources of sufficient interest. By the time of the conference we expect to report on the detection and automatic response of BAT and Swift to tens of bursts and transients.

Scott Barthelmy  
NASA/GSFC

Date submitted: 20 Jan 2005

Electronic form version 1.4