

# Gamma-Ray Bursts

one reason why “astronomical” is an adjective

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A few times a day somewhere in a galaxy far, far, far away, a special type of massive star gives birth to a black hole, ejecting material in a jet that moves very close to the speed of light. During their fleeting existence, these jets literally flood much of the universe with gamma-rays. Their power output can be a significant fraction of the power produced by all the stars in all the galaxies in the entire universe.

Gamma-Ray Bursts were discovered at Los Alamos more than 30 years ago as a part of the nuclear nonproliferation efforts.

Recently, robotic telescopes on the ground and satellites that autonomously steer themselves have started to unravel the mysteries behind these largest explosions since the big bang. This presentation will summarize advances from the recently launched Swift satellite, including an event so huge, it affected the Earth's atmosphere.

Tuesday, 6 September 2005 at 7:30 PM

Duane W. Smith Auditorium

Los Alamos High School, Los Alamos

**Wednesday, 7 September 2005 at 7:30 PM**

James A. Little Theater, New Mexico School for the Deaf  
1060 Cerrillos Road, Santa Fe

**Thursday, 8 September 2005 at 7:30 PM**

New Mexico Museum of Natural History and Science  
1801 Mountain Road NW, Albuquerque

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