

Expected Launch:  
July 2002

# GALEX

<http://www.srl.caltech.edu/galex/>

## Galaxy Evolution Explorer

### *Mission*

GALEX, the Galaxy Evolution Explorer, is an ultraviolet imaging and spectroscopic survey mission designed to map the global history and probe the causes of star formation from the current era back to a time when the Universe was roughly one-fifth its present age. During this time period, galaxies and the gas they contain have changed dramatically, forming most of the structures we see today. Data from GALEX will help astronomers understand what galaxy-wide factors drive star formation and the evolution of galaxies.

### *Education and Public Outreach Program*

A multifaceted outreach program is underway for GALEX. It will provide timely and engaging information about GALEX accomplishments and discoveries to the public, the media, and the educational and scientific communities. It includes outreach activities by GALEX team members and easy public access to GALEX information. It also describes the structure and origin of galaxies and why these phenomena are relevant to the public. The GALEX Education and Public Outreach Program will use proven NASA outreach programs, including The Space Place to make information accessible to all audiences. One GALEX activity online at The Space Place is "Make a Galactic Mobile" at:

[http://spaceplace.nasa.gov/galex\\_make1.htm](http://spaceplace.nasa.gov/galex_make1.htm)

EPO main sites: <http://spaceplace.nasa.gov/> and <http://spaceplace.nasa.gov/espanol/index.htm>

### *Seeing and Exploring the Universe*

When massive stars are created from their cocoons of gas and dust in galaxies, they shine brightly at ultraviolet energies, heating up and fluorescing the gas the around them. Ultraviolet observations can directly determine the rate that stars form in galaxies. By observing tens of thousands of galaxies, we can deduce what happens over time as the galaxies live and die. Stars and gas are the basic building blocks of galaxies, from our own Milky Way to the most distant galaxies ever seen. The cores of stars are factories for converting hydrogen and helium into ever-heavier elements, so we owe our very existence to massive stars. Studying them gives us vital clues into how we came to exist.

