across the Universe. Way, and tound black holes in the center of our Milky supermassive black hole the region around the Chandra has observed

## RESULTS

dark energy studies. contributing to both dark matter and collision of galaxies in a cluster and is dark matter from normal matter in the Chandra has traced the separation of

#### nasa.gov

#### chandra.si.edu

NASA's Marshall Space Flight Center in Huntsville, Alabama, manages the Chandra program for NASA's Science Mission Directorate in Washington. The Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, controls Chandra's science and flight operations.

#### Cady Coleman mission specialist who deployed Chandra.

### "There is nothing as beautiful as Chandra sailing off on its way to work."

# THE CHANDRA X-RAY OBSERVATORY

NASA's Chandra X-ray Observatory

to detect X-ray emission from very

hot regions of the Universe such as

exploded stars, clusters of galaxies,

RESULTS

is a telescope specially designed

and matter around black holes.

# LAUNCH + DEPLOYMENT

July 23, 1999



Chandra has imaged the spectacular, glowing

**FIRST LIGHT** 

Because X-rays are absorbed by Earth's atmosphere, Chandra must orbit above it, up to an altitude of 139,000 km (86,500 mi) in space.



optical bench. the end of the 9.2- m (30-tt.) onto electronic detectors at hollow shells and are tocused X-rays strike the insides of the each other. The energetic sensitive mirrors nested inside Chandra carries four very

Jeffrey Ashby, Catherine Coleman, Michel Tognini, Steven Hawley, Eileen Collins

# STS-93 CREW