



Chandra X-ray

Observatory Center

Harvard-Smithsonian Center for Astrophysics 60 Garden St. Cambridge, MA 02138 USA http://chandra.harvard.edu

NGC 1385, NGC 1566, NGC 3344, and NGC 6503: Four galaxies with dense, central star clusters. (Credit: X-ray: NASA/CXC/Washington State Univ./V. Baldassare et al.; Optical: NASA/ESA/STScI)

Caption: These four galaxies are part of a large survey of more than 100 galaxies conducted by Chandra that looked for evidence of growing black holes. A new study uncovered evidence that stellarmass black holes in these dense environments are ripping apart multiple stars, and then using their debris to fuel their growth. The Chandra results provide one pathway for the creation of "intermediate mass black holes," a class that are bigger than the stellar-mass variety but smaller than supermassive black holes. In each of these images, Chandra data (blue) have been combined with optical images from the Hubble Space Telescope.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory