

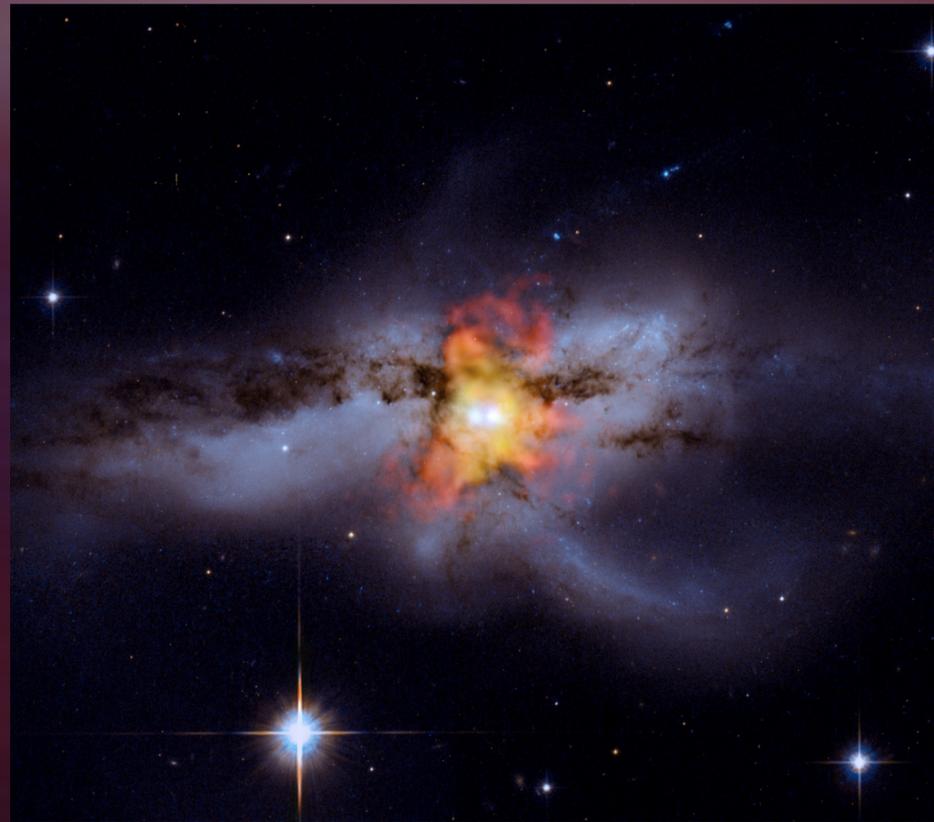
BLACK HOLES

A black hole is a dense, compact object whose gravitational pull is so strong that—within a certain distance of it—nothing can escape, not even light. Black holes range in size from a few times the mass of the Sun to millions or even billions of times the Sun’s mass. Using Chandra, astronomers have learned a great deal about black holes and how they influence their environments.



One of the most important black holes to study is the one found at the center of our Milky Way galaxy. Known as Sagittarius A*, this black hole is about 4 million times the mass of the Sun and Chandra has revealed much about its behavior and history.

NASA/CXC/Univ. of Wisconsin/Y.Bai, et al.



Galaxies can merge and when they do, the supermassive black holes at their centers may also collide. This is the case of NGC 6240 where Chandra finds two giant black holes—the bright point-like sources in this middle of the image—are only 3,000 light years apart.

X-ray: NASA/CXC/MIT/C.Canizares, M.Nowak; Optical: NASA/STScI



The galaxy Centaurus A is well known for a spectacular jet of outflowing material—seen pointing from the middle to the upper left in this Chandra image—that is generated by a giant black hole at the galaxy’s center. Chandra has also revealed information about smaller black holes throughout Centaurus A.

X-ray: NASA/CXC/U.Birmingham/M.Burke et al.