



**Chandra X-ray
Observatory Center**

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SS 433: A black hole & massive binary star system about 16,000 light years from Earth.
(Credit: X-ray: NASA/CXC/U.Amsterdam/S.Migliari et al., Illustration: CXC/M.Weiss)

Caption: The lobes of hot gas observed on either side of the black hole (shown in the illustration, lower right) are due to the pileup of blobs of hot gas ejected at a quarter of the speed of light from the vicinity of the black hole. Material is ejected from this disk in narrow jets that slowly wobble or precess around a circle (represented by blue circular arrow), from the sketched location of the jet at one extreme to the dotted white line at another. As the material slows down, it gets rear-ended by other blobs. This high-speed collision produces the lobes of hot gas.

Scale: Image is 6.5 arcsec across

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory