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Spiderweb Galaxy Field (J1140-2629): Nicknamed the "Spiderweb," a galaxy in a protocluster about 10.6 billion light-years away.

(Credit: X-ray: NASA/CXC/INAF/P. Tozzi et al; Optical (Subaru): NAOJ/NINS; Optical (HST): NASA/STScI)

Caption: Data from Chandra (purple) reveal feasting and growing black holes throughout the cosmic web that surrounds a central galaxy. Nicknamed the "Spiderweb" because of its appearance in optical light images (see Hubble image in inset), J1140-2629 is part of a larger system that is evolving into a galaxy cluster, one of the largest structures in the Universe. The X-rays show how many black holes are rapidly growing at this critical epoch in the Universe, over 10 billion years ago. The main panel shows Chandra data (purple) that have been combined with an optical image from the Subaru telescope in Hawaii (red, green, and white).

Scale: Main image is about 6.8 arcmin (11.3 million light years) across; Inset image is about 36 arcsec (1 million light years) across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory