



**Chandra X-ray
Observatory Center**

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J075141 and J174140: The shortened names of two systems that will evolve into a rare class of binary stars in the future.

(Credit: Illustration: NASA/CXC /M.Weiss)

Caption: Astronomers have identified two systems to be the progenitors of a class of objects known as AM CVns, where one white dwarf star is pulling matter from a very compact companion star, such as a second white dwarf. The artist's illustration depicts what the two systems are like now and what may happen to them in the future. These systems are predicted to generate gravitational waves, ripples in space-time predicted by Einstein. Chandra and optical telescopes were used to identify the two binary systems - called J0751 and J1741 - that will turn into these rare AM CVn systems in the future.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory