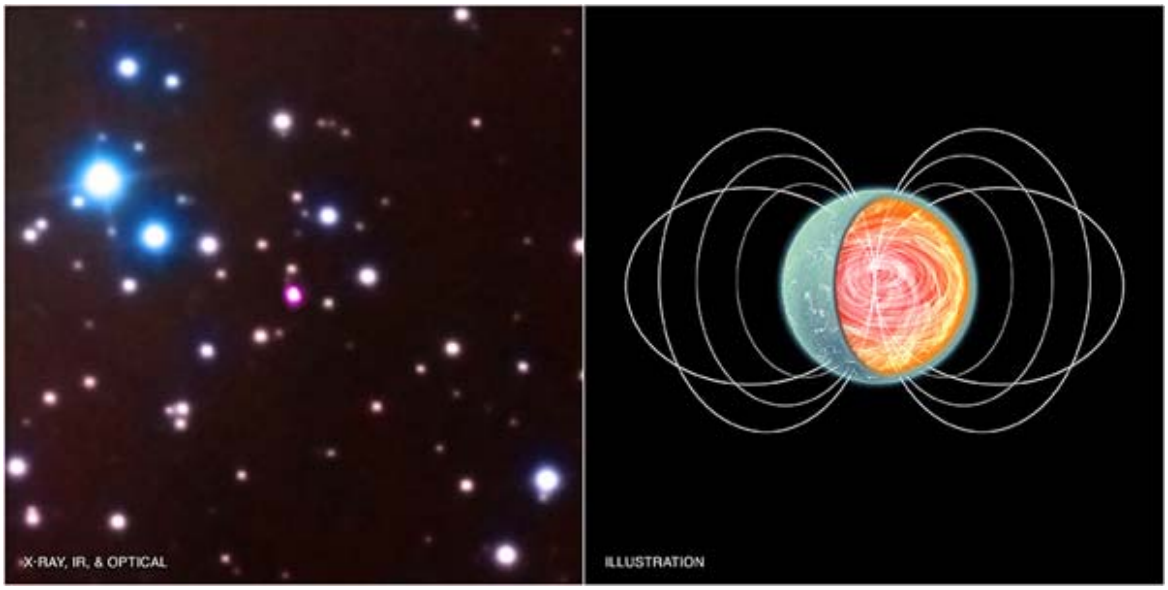

Chandra X-ray Observatory Center

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

SGR 0418+5729: A magnetar located in our galaxy, about 6,500 light years from Earth.
(Credit: X-ray: NASA/CXC/CSIC-IEEC/N.Rea et al; Optical: Isaac Newton Group of Telescopes, La Palma/WHT; Infrared: NASA/JPL-Caltech; Illustration: NASA/CXC/M.Weiss)

Caption: This graphic shows a magnetar called SGR 0418+5729 (SGR 0418 for short), a type of neutron star that has a relatively slow spin rate and generates occasional large blasts of X-rays. Most magnetars have extremely high magnetic fields on their surface that are ten to a thousand times stronger than for the average neutron star. New data from NASA's Chandra X-ray Observatory, ESA's XMM-Newton and NASA's Swift and RXTE satellites shows that SGR 0418 is exceptional, with a surface magnetic field similar to that of mainstream neutron stars. In the image on the left, data from Chandra shows SGR 0418 as a pink source in the middle. Optical data from the William Herschel telescope in La Palma and infrared data from NASA's Spitzer Space Telescope are shown in red, green and blue. On the right is an artist's impression giving a close-up view of SGR 0418. This illustration highlights the weak surface magnetic field of the magnetar, and the relatively strong, wound-up magnetic field lurking in the hotter interior of the star. SGR 0418 is located about 6,500 light years from Earth.

Scale: Image is about 2 arcmin across. (about 3 light years)

Chandra X-ray Observatory ACIS Image

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