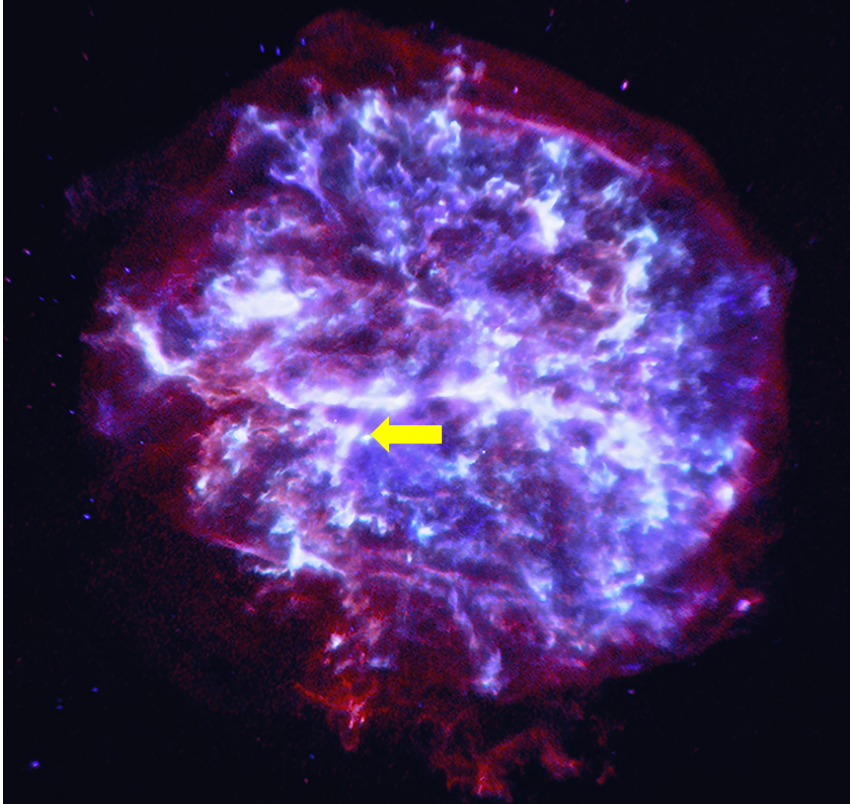




# Chandra Science Highlight

## G292.0+1.8 A Galactic Core-Collapse Supernova Remnant



Caption: X-ray image of the supernova remnant G292.0+1.8 . The image is colored according to the energy bands of the X-rays: Red (0.58-0.95 keV); Green (0.98-1.1 keV); Teal (1.28-1.43 keV); Blue/Purple: (1.81-3.00 keV). The location of the pulsar, which is moving rapidly to the lower left, is indicated by the arrow.

Distance estimate: 20,000 light years

Scale: Image is 11.5 arcmin across (about 66 light years)

- G292.0+1.8 is a young (~3000 yr) supernova remnant produced by the explosion of a massive star (10 – 30 solar masses).
- Most of the Si, S and Fe-rich X-ray-emitting ejecta are located in the upper right portion of the remnant, opposite to the pulsar's projected angular displacement to the lower left away from the center of the remnant.
- This suggests that the pulsar's kick may have originated from gravitational and hydrodynamic forces during an asymmetric explosion

Credits: NASA/CXC/University of Texas/J. Bhalerao et al.

Instrument: ACIS

Reference: Bhalerao, J. et al. 2019, ApJ, 872, 31;  
[arXiv:1812.09605](https://arxiv.org/abs/1812.09605)