A super-bubble fades away

Jürgen Kerp(*Radiastronomisches Institut der Universität Bonn*) Fabian Walter (*California Institute of Technology*), Neb Duric (*Department of Physics and Astronomy, University of New Mexico*), Elias Brinks (*Departemento de Astronomia, Guanajuato*)

Abstract

Sites of massive star formation are thought to shape their surrounding interstellar medium. Through massive stellar winds produced by the most massive stars, as well as through subsequent supernova explosions. According to the standard picture, these low volume density cavities are filled with coronal gas. Depending on their size, they are classified as bubbles, shells or super-shells. Using *ROSAT* PSPC data we claimed the detection of X-ray emission originating from a supergiant HI shell within the nearby (3.2 Mpc) dwarf galaxy IC 2574. The angular extent as well as the faintness of the detected X-ray signal did not allow unique clues on the origin of the X-ray emission. A follow-up deep *Chandra* observation disclosed that in the very center of the supergiant HI shell a point-like source is located. We present a detailed comparison of the *ROSAT* and *Chandra* data and comment on the difference in interpretation.

CATEGORY: SUPERNOVAE, SUPERNOVA REMNANTS AND ISOLATED NEUTRON STARS