The Chandra image shows the outer blast wave produced by the supernova (blue = higher energy X-rays), and an inner ring of cooler (red-orange = lower energy X-rays) material. This inner ring is probably expanding ejecta from the explosion that is being heated by a shock wave traveling backwards into the ejecta.

Credit: Credit:  (NASA/CXC/MIT/D.Dewey et al. & NASA/CXC/SAO/J.DePasquale)


E0102-72.3  is the ~ 1000-year-old remnant of a very massive star that exploded in the Small Magellanic Cloud, a nearby galaxy.

X-ray measurements of the Doppler shifts of X-ray emission lines indicates that the remnant is shaped like a cylinder that we see end-on.

Possible explanations of the asymmetry include an asymmetric explosion, or that the material around the pre-supernova star was concentrated into disk formed when material was shed from the equator of the pre-supernova red giant star.