abstract

We present results from Chandra and XMM-Newton X-ray observations of NGC 4214, an nearby dwarf starburst galaxy containing star formation. Starburst regions are known to be associated with diffuse X-ray emission, and in this case the X-ray emission from the galaxy shows an interesting morphological structure within the galaxy, clearly associated with the central region of star formation. Of the two main regions of star formation in this galaxy, X-ray emission associated with the older is identified within the region of star formation.

The point source population of the galaxy has an X-ray luminosity function with a slope of $-0.76$. This result, together with those for other dwarf starburst galaxies (NGC 4449 and NGC 5253), was added to a sample of luminosity functions for dwarf starburst galaxies.