Identification campaign of supernova remnants in the Milky way
[ X-ray properties of G308.3-1.4 and its central compact object ]

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ABSTRACT

G308.3-1.4 is one of the brightest target in our long-term identification campaign of supernova remnant (SNR) candidates in the Milky way. With a short exposure by Chandra X-ray observatory, an incomplete shell-like X-ray structure which is well-correlated with the radio emission morphology is revealed. Its X-ray spectrum also presents the presence of a shocked-heated plasma. All these evidences confirm G308.3-1.4 as a SNR. Besides identifying new SNRs, our observation campaign can also help to search for the central compact objects (CCOs) which is one of the poorly known manifestations of neutron stars. In the same Chandra observation, a bright X-ray point source is detected close to the remnants center. Its X-ray spectral properties are similar to those of CCOs or quiescent low-mass X-ray binaries. While the red end of its optical/IR counterpart's spectral energy distribution suggests a late-
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INTRODUCTION

We initiate extensive identification campaign of unidentified extended ROSAT All-Sky Survey Object. As one of the outstanding pilot targets, We have observed the brightest candidate G308.3-1.4 with the state of art Chandra X-ray observatory.

REFERENCE

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