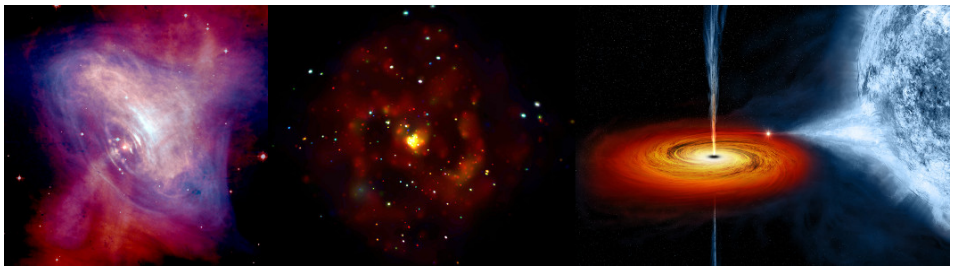

Contribution ID: **119** Type: **not specified**

Millimeter wavelength observation of black hole X-ray binary MAXI J1803–298

The Galactic black hole X-ray binary candidate MAXI J1803–298 was first discovered with the nova search system of MAXI (Serino et al. 2021). NuSTAR and NICER found periodic absorption dips, and Swift detected absorption lines likely originating in a disk wind, both suggestive of a high inclination angle above ~ 70°. A sign of an outflow was also detected in optical spectroscopy, where p Cygni-like profiles were detected in hydrogen Balmer lines (Buckley et al. 2021). The X-ray binaries also show the two other fundamental ingredients of accretion onto compact objects: relativistic jets and hot, dense winds. To study the millimeter wavelength jets from the X-ray binary, we have used the Atacama Large Millimeter/Sub-millimeter Array. We have studied the (sub)millimeter-wavelength physical properties of MAXI J1803–298. We detect the unresolved millimeter wavelength continuum emission from the above X-ray binary candidate. We also find that the peak flux varies from 6.949±0.094 μJy beam^{-1} to 7.446±0.033 μJy beam^{-1} and global spectral index from SED model is 1.14±0.05. We study the jet-disk coupling and broadband characteristics from X-ray to radio wavelengths.

Presentation Type

Poster

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