

**S27c VLA observations of H<sub>2</sub>O maser in NGC 6240**

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NGC 6240 is a prototypical luminous far-infrared(FIR) galaxy, hosting an active nucleus in the double-nuclei structure. In Hagiwara et al. (2002), we reported on the discovery of 22 GHz water maser in the galaxy, using the MPIfR 100-m telescope. We also performed VLA observations to pinpoint the location(s) of the maser. One of the maser components, which is redshifted about 400 km/s from the galaxy's systemic velocity, was detected with the VLA. The maser remains unresolved at 0.3 arcsec. The maser coincides with the southern 22 GHz continuum peak to 0.007 arcsec (3 pc:  $D = 97$  Mpc). The detection of the maser in the southern nucleus indicates that nuclear activity of the galaxy, which is significant in X-ray, lies mainly in the southern nucleus, and the nucleus without a high brightness peak could be explained by thick dusty medium emitting FIR radiation. This, together with the large maser luminosity, strongly suggests that the maser in NGC 6240 is associated with AGN-activity.