

## Methanol maser polarization toward a massive star forming region, G10.34-0.14, using the KVN and the ALMA telescopes

Ji-hyun Kang, (KASI) Do-Young Byun, Kee-Tae Kim, Jongsoo Kim, Aran Lyo, Woojin Kwon (KASI) Mi-Kyung Kim (NAOJ) Wouter Vlemmings, Boy Lankhaar (Onsala Observatory) and Gabriele Surcis (INAF-Cagliari)

We present the linear polarization results of the KVN VLBI and the ALMA observations of the 44 GHz and the 95 GHz Class I methanol maser transition lines toward a massive star forming region, G10.34-0.14. The ALMA data show three mm continuum sources in this region. We identified about 30 maser features together with the 20000 AU-sized thermal methanol outflow. Some strongest masers show a few percent of linear polarization. Their polarization properties are consistent to the VLBI polarimetric observations performed with the KVN telescope, in spite of two orders of magnitude scale differences, indicating that the masing regions have consistent magnetic field environments over these scale lengths (6 AU to 600 AU).