

ABSTRACT

WITTKOWSKI, Markus
ESO-Garching

Variability of SiO maser emission toward evolved stars
(M. Wittkowski, E.M.L. Humphreys, M.D. Gray, D.A. Boboltz, C. de Breuck)

We present recent observations of high-frequency SiO maser emission toward a sample of evolved stars obtained with APEX at several epochs. These observations are compared to predictions of a combined dynamic atmosphere and maser propagation model of SiO maser emission. Hereby, constraints on the structure of the close circumstellar environment and the mass-loss process can be provided. Our observations also represent an important precursor study for forthcoming mapping of the circumstellar environment of evolved stars using ALMA. Many of our targets are also targets of the Herschel key programme on mass-loss of evolved stars (MESS), and we will discuss possible synergies between our observations and the MESS observations.