

*Workshop*

## **Imaging of Stellar Surfaces**

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**Title:**

Radio Imaging of Envelopes of Evolved Stars

**Abstract:**

This talk will cover imaging of stellar envelopes using radio VLBI techniques; special attention will be paid to the technical differences between radio and optical/IR interferometry. Radio heterodyne receivers allow a straightforward way to derive spectral cubes and full polarization observations. Milliarcsecond resolution of very bright, i.e. non thermal, emission of molecular masers in the envelopes of evolved stars can be achieved using VLBI techniques with baselines of thousands of km. Emission from SiO, H<sub>2</sub>O and OH masers are commonly seen at increasing distance from the photosphere. The very narrow maser lines allow accurate measurements of the velocity field within the emitting region.