

## Mid-infrared heterodyne interferometry with the Infrared Spatial Interferometer

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**Abstract.** The Infrared Spatial Interferometer (ISI) is a three telescope array located at Mt. Wilson. It is a unique mid-IR system that uses heterodyne detection with CO<sub>2</sub> lasers as local oscillators. Mid-IR measurements of red supergiant stars and Asymptotic Giant Branch stars have been conducted for about 20 years. The ISI provides precision measurements of stellar sizes and asymmetries, and also measurements of the dust shells surrounding these stars. We have observed changes of these quantities over time periods of weeks to decades. A new high-speed digital spectrometer-correlator has recently been built. It will provide a new capability to measure stellar visibilities on-and-off individual molecular spectral lines. These spectro-interferometric measurements will help determine the nature of extended stellar atmospheres.

The material presented at the conference has recently been published and the author proposes to the reader the references below.

### References

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