

*Workshop*

## **Imaging of Stellar Surfaces**

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**Title:**

VLT/PIONIER imaging of red supergiant stars

**Abstract:**

PIONIER (Precision Integrated-Optics Near-infrared Imaging Experiment) was the first 4-telescope instrument installed at the Very Large Telescope Interferometer (VLTi) in 2010. Benefiting from the multiple interferometric configurations available at the Cerro Paranal observatory, it can efficiently image stellar surfaces. With their large linear sizes, nearby red supergiant stars are among the most interesting targets for such instrument. Near infrared interferometry allows to study their surface in order to get a better understanding of their mass loss, mostly by constraining the characteristics of their photospheric features. I will review recent results obtained with VLTi/PIONIER on red supergiant stars, and emphasize the different techniques used to analyze these observations.