Immersion Grating Infrared Spectrograph (IGRINS)

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Facility

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Instruments

- Instrumentation Main Page

Facility Instruments:

- Large Monolithic Imager (LMI)
- DeVeny Optical Spectrograph
- NIR Spectrograph (NIHTS)

Visitor / PI Instruments:

- High-Res Spectrograph (EXPRES)
- Speckle Imager (QWSSI)
- High Speed Imager (POETS)
- NIR Spectrograph (RIMAS)

User Manuals:

- LMI Manual
- DeVeny Manual
- NIHTS Manual

Observing Planning

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- Planning Checklist
- Remote Observing
- Target Lists
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At the Telescope

- Observing Quick Links
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- LDT Startup Procedures
- Closure Conditions
- Night Feedback Form
- End of Night Tasks

~~~ PHOTOS HERE ~~~

Visitor Instrument – Not available at LDT after 2019 April 30.

Mounting Port: None

Manual:

Additional Information:

Instrument Scientist: Kimberly R Sokal (ksokal at utexas dot edu)

This information remains posted for reference only.

The Immersion Grating Infrared Spectrograph (IGRINS) is a visitor instrument from the University of Texas and the Korea Astronomy and Space Science Institute KASI. IGRINS is a high-resolution near-infrared spectrograph that covers the entirety of H- and K-bands (~1.5-2.5 m) in a single setup at a resolution of R=/~45,000. On the LDT IGRINS will obtain SNR~100 (per resolution element) in 1 hour for a K=12 magnitude source. Additional information is available at the IGRINS wiki.

Signal to noise information for IGRINS can be found under the IGRINS Wiki Signal to Noise Page.

IGRINS users should review the IGRINS Publication Policy.

The agreement brought IGRINS to LDT for three 6-month visits over 2016-2019, with the first of these visits being 1-Sept-2016 to 28-Feb-2017. The dates of the IGRINS second visit were 1-Sep-2017 to 25-Jan-2018. The dates of the third IGRINS visit were 16 September 2018 through 30 April 2019.
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For the second visit, the IGRINS mount was modified to place the instrument entrance and slit plane much closer to the middle of the telescope focus range. This modification was a success. This means that observers have the option to use either the IGRINS guider or the facility guider(s) with IGRINS this time. This change was tested and confirmed during the installation and re-commissioning of IGRINS on LDT at the end of August, 2017. The facility guider can be used in all guider modes (sidereal, non-sidereal, ephemeris tracking, and fixed rotator angle).

No changes were made to IGRINS for the third visit, but changes to observing methods have been added to the IGRINS wiki and should be reviewed by observers. During January 2019, we expect that IGRINS will need to be warmed and pumped. It will be unavailable for a week while this happens. The specific dates are yet to be determined and will depend upon IGRINS team members availability to do the work and science observing needs.