M134-009 **Room: 201B** **Time: May 29 9:15-9:30**

Monitoring observations of the Venus O2 night airglow

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We will conduct near-infrared imaging spectroscopy of the nightside of Venus at NASA's Infrared Telescope Facility in July and September, 2007. The cryogenic echelle spectrograph (CSHELL) is to be used for acquiring high-resolution spatially resolved spectra of O_2 airglow.

The 0.5-arcsec slit provides a spectral resolution of about 40,000. The spectra contain several rotational lines of R-branch of the airglow and we can derive the rotational temperature distributions on the nightside hemisphere. The intensity distributions are also derived from data cubes.

The purpose of these observations is to monitor the temporal variation of the airglow intensity and rotational temperature distributions. We will observe Venus for 8 hours in a day.

In this presentation, we will show temporal variations of the airglow and its rotational temperature. And we will also compare the distributions with the airglow distributions observed with the Venus Express.