

Einladung zu einem Kolloquium

Datum/Zeit: **Dienstag, 03.12.2024, 16.45 Uhr**

Referent: **Prof. Amanda Ross**
Université de Lyon, Lyon, France

Titel: *Electronic spectra of CrH and FeH: from laboratory spectroscopy to stellar atmospheres*

Ort: **HCI G7**

Molecular signatures are becoming increasingly important in spectro-polarimetric studies attempting to detect exo-planets around M-type stars, and many of these stars are magnetically active. Our work targets laboratory investigation of the magnetic response of CrH and FeH, whose electronic systems in the near IR have been observed in the atmospheres of cool stars. Reliable zero-field line lists already exist for these systems. We add information from Zeeman experiments with fields up to 7 kGauss. I will present some of the spectroscopic challenges presented by the sextet (CrH) and quartet (FeH) systems of these two radicals, and discuss the consequences for telescope spectro-polarimetry, taking illustrations from stellar spectra recorded at the Pic du Midi and at the Canada-France-Hawaii telescope.

Gäste sind willkommen