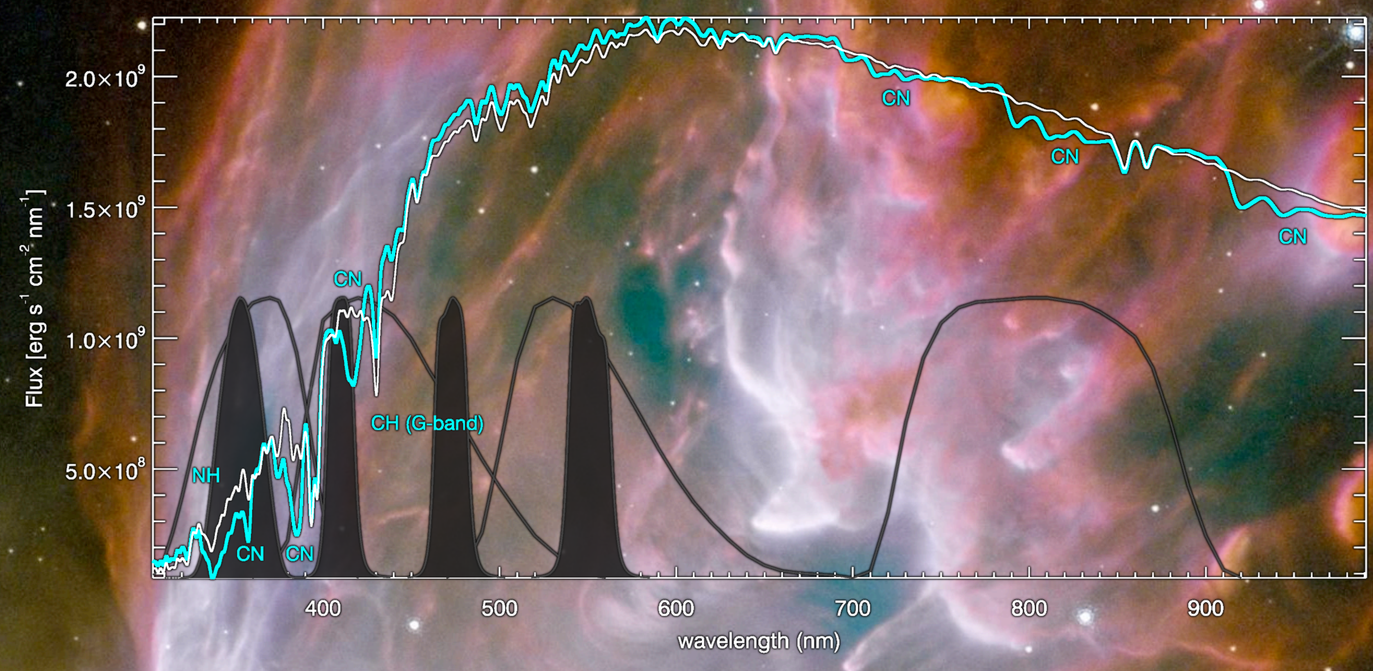
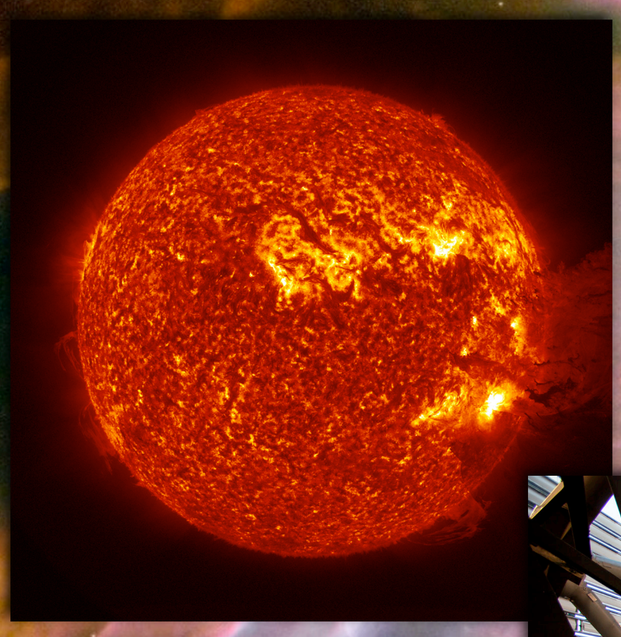
Abundance analysis of cool stars

Block course for Bachelor (from 2nd year), Master and PhD students
Lecturers: H.-G. Ludwig, C. J. Hansen, L. Sbordone, & N. Christlieb
WPSpez/MVSpec; 4 Credit Points

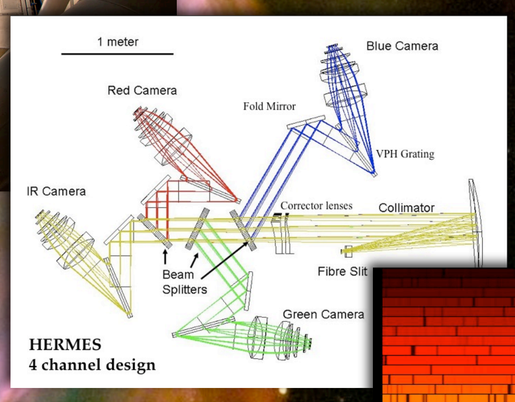
In this course, you will learn all steps of determining the chemical composition of cool stars, from data reduction to elemental abundances.

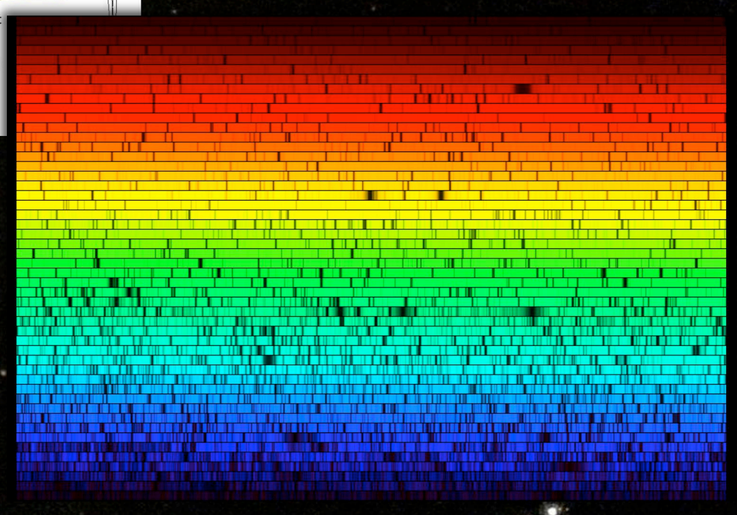




The covered topics include:

- Spectroscopy
- Data reduction and calibration
- Stellar atmospheres
- Formation of spectral lines
- Spectral synthesis
- Scientific applications.





$$\frac{n_{i+1}n_e}{n_i} = \frac{2}{\Lambda^3}\exp\left[-\frac{(\epsilon_{i+1}-\epsilon_i)}{k_BT}\right]$$

Prerequisites: Introduction to Astronomy and Astrophysics I.; basic knowledge of a higher programming language

Monday, 25 February 2013 to Friday, 8 March 2013
Daily 9:00-12:00 and 13:00-16:00 in the CIP pool of Physikalisches Institut, Klaus-Tschira-Gebäude, Im Neuenheimer Feld 223, 1st floor

Registration via e-mail (h.ludwig@lsw.uni-heidelberg.de)
until 8 February 2012.

To the course web page!
or visit:
http://www.lsw.uni-heidelberg.de/projects/galactic_archaeology/blockcool2013.phtml