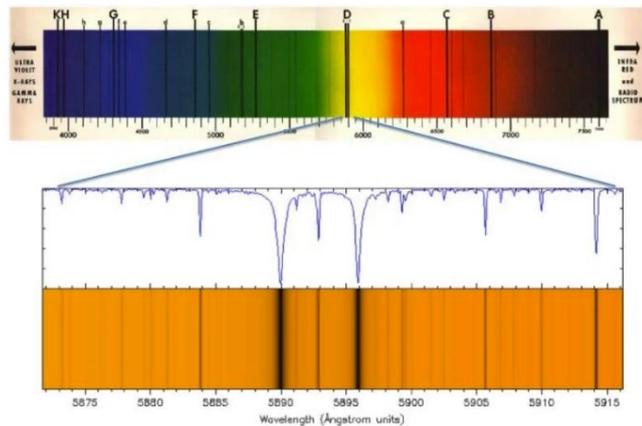


Investigating the solar spectrum

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Project Statement:

The NWU Solar Telescope has a hyperfine solar spectrometer which will be used in this project to investigate the solar spectrum. The project outcomes are summarised below:

- Installation of the solar spectrometer.
- Examining the solar spectrum.
- Acquiring high resolution solar spectra.
- Measuring the Doppler shifts caused by the Sun's rotation.

In this project, the student will:

1. study the solar spectrum,
2. perform daily solar observations with the white-light telescope and the solar spectrometer,
3. process the acquired data and compare the results with theory.

Student development and recommended skills:

This project requires a unique candidate that can do daily solar observations with the white-light telescope and the solar spectrometer. The student will study the theoretical underpinnings of what is being observed daily. The student must be comfortable with the Python programming language and have an aptitude for experimental work, such as telescope observations.