



The fingerprint of a star: HD 82106

HD 82106 = BD+06°2182 is a K3 dwarf star. It has comparable high proper motions with respect to the Sun but is otherwise a normal star. This poster shows the optical spectrum of HD 82106 obtained with the Potsdam Echelle Polarimetric and Spectroscopic Instrument (PEPSI) of the Large Binocular Telescope (LBT). It plots the normalized intensity as a function of wavelength λ in Angströms (1Å=0.1nm) from the top left corner to the bottom right corner. The PEPSI spectrum covers the wavelengths between 3820 Å (top left) and 9130 Å (bottom right) with

an average spectral resolution of $R=\lambda/\Delta\lambda=220,000$ or approximately 1.4 km/s. Its average dispersion is 0.012 Å/pixel. Integration time with the LBT was 5 min and consists of 1-3 exposures in all six cross dispersers. The signal-to-noise ratio (S/N) of the spectrum peaks at 480:1 at 7000 Å and has a low of 10:1 near the blue cutoff. The bluest part appears underexposed and we omitted it from the poster. The exposure was obtained on April 1, 2015. A subset of spectral absorption lines is identified in the graphics and marked with dashes beneath the spec-

trum. The annotation indicates the chemical element (e.g., Fe for iron), the ionization state (I for a neutral line, II for an ionized line), and the wavelength in Angström. The original spectrum has been published in *Astronomy & Astrophysics* (Strassmeier, K. G., Ilyin, I., & Weber, M. 2018, A&A, 612, A45; see <https://pepsi.aip.de/>).

