



The fingerprint of a star: HD 22879

HD 22879 = BD-03°592 is a F9 dwarf star of high proper motion. This poster shows the optical spectrum of HD 22879 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 8-10 min and consists of 1-2 exposures in all six cross dispersers. The signal-to-noise ratio (S/N) of the spectrum peaks at 780:1 at 8250 Å and has a low of 180:1 near the blue cutoff. The exposure was obtained on September 27, 2015. A subset of spectral

absorption lines is identified in the graphics and marked with dashes beneath the spectrum. 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/>).

