



The fingerprint of a star: β Vir

β Virginis (5 Vir = HD 102870), named Zavijava, is an F9 dwarf star. Despite its designation 'beta' it is only the fifth-brightest star in the constellation of Virgo. Larger and more massive than the Sun, it is comparatively metal-rich and suspected to host two planets. This poster shows the optical spectrum of β Vir 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 2 min, and 20 min with the VATT, and consists of 2-10 exposures in all six cross dispersers. The signal-to-noise ratio (S/N) of the spectrum peaks at 1220:1 at 8250 Å and has a low of 250:1 near the blue cutoff. The exposure was obtained on April 3-8, 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/>).

