FP1 Diagnostics of Lambda Bootis stars atmospheres using NaD, H-alpha and Paschen lines

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High signal-to-noise high resolution spectroscopic observations of seven bright well-known Lambda Bootis stars: HD 31295, HD 91130, HD 110411, HD 125162, HD 183324, HD 192640, and HD 221756 are presented. Sharp absorption details observed in the bottoms of NaD lines in HD 192640 and HD 221756 do not show any radial velocity changes with an accuracy up to 1 km s⁻¹. A conclusion of their interstellar origin is made. Manifestations of nonradial pulsations reported earlier by Bohlender et al. are observed both in NaD and H-alpha line profiles. Inglis-Teller formula was used to evaluate electron density in the upper atmospheric layers ($\tau \approx 0.1$). The values obtained for N_e are typical for normal A stars with relevant effective temperatures and spectral classes.

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