## $\left| ext{F P7} ight|$ The enigma of lithium in roAp stars

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An international project "Lithium in cool Ap stars" has been run since 1996 with the purpose of creating an observational database allowing systematic studies of the abnormal occurence of lithium on the surfaces of cool Ap-stars. The 2.6 m telescope at the Crimean Astrophysical Observatory, the ESO CAT, the Nordic Optical Telescope, and the 74" telescope at Mount Stromlo were employed to collect observations at the regions of the lithium resonance lines  $\lambda$  6103 and  $\lambda$  6708 Å.

Observations of the roAp-stars HD 83368, HD 60435 and HD 3980 revealed considerable periodical Doppler shifts of the line of lithium  $\lambda$  6708 Åwhich can be explained by a presence of lithium spots on their surfaces. Conjunction with structures of magnetic field is apparent.

A detailed study of the blend at  $\lambda$  6708 Å in HD 101065 confirmed the anomalous overabundance of lithium amounting to 3.1 dex, as well as unusual isotopic ratio  ${}^6Li/{}^7Li$  approx. 0.3.

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