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## POS-9 Results of abundancy analysis for Sirius

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The results of analysing of the chemical abundance in stellar atmosphere of Sirius are presented as a part of the project VeSELKA that aims to search for evidence of vertical stratification of elements' abundance in chemically peculiar (CP) stars. Using the high resolution and high signal to noise spectra obtained with the spectropolarimeter NARVAL, we have analysed hundreds of line profiles with the help of the code ZEEMAN2. The estimates of average abundance for 39 chemical elements were obtained for two phases of orbital rotation of Sirius in binary system. We were able to find a significant overabundance of argon, scandium, manganese, cobalt and some rare-earth elements, and an under-abundance of molybdenum for two phases of Sirius orbital motion in binary system.

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