

## **Microvariability of line profiles in spectra of OB stars and their magnetic fields**

Alexander Kholtygin<sup>1</sup> , Sergei Fabrika<sup>2</sup> , Tatyana Burlakova<sup>2</sup>

1 - Astronomical Institute of St.Petersburg State University, Russia

2 - Special Astrophysical Observatory, Russia

The results of searching for the line profile variability (lpv) in the spectra of OB stars are reported. The observations were made with the 1.8 m telescope of Korean Bo-hyunsan Optical Astronomical Observatory and 1-m and 6-m telescopes of Special Astrophysical Observatory, Russia. We find the regular lpv in the spectra of all program stars. A connection of regular lpv with the presence of the stellar magnetic field is demonstrated. The results of searching for the magnetic fields for bright OB stars are reported. The influence of weak magnetic stellar fields on lpv is investigated. For some program stars the irregular lpv was also found. As a tool for detecting the local details of line profile connected with irregular lpv we use the wavelet transform. We connect the appearance of these details with the formation and destruction of the small-scale structures (clumps or clouds) in the wind. The evidence that numerous clumps exist in the winds of the O6 star  $\lambda$  Ori A and O9.5 star  $\delta$  Ori A are found.