

Subject: V-266, visit Natallia Sudnik

We would like to thank NOVA's continued support for this visit of Dr. Natallia Sudnik, Minsk Pedagogical University, from 7 January till 3 February 2019.

We continued to work on our project to model the rapid variability in the circumstellar optical lines of the O7.5 giant ξ Persei. Earlier we had discovered the rotation period of 2.04 days in ξ Per, by analyzing 12 years of UV spectra. This would imply that the star has a permanent (weak) magnetic field, but so far no measurement at a favorable rotational phase has been obtained. This is the only O star for which a rotation period has been discovered, which has major consequences for the explanation of a multitude of properties of O stars, which includes UV, and X-ray variability, and space photometry.

We have circulated a nearly finalized draft "On the rotation period of the O giant ξ Persei: a magnetic star?" by H.F. Henrichs and N.P. Sudnik to A&A, and received very valuable comments from several world's experts, which are now being implemented.