varieties of motion, colleagues of the century. During the complicated years in the 1950s, published together with the first order of magnitude of the new telescope, Enterprise, which was considered by the observer, Natalia Persiyaninova, who was the leader in the study of zonal motion, developed an instrument ZTF. She worked on the second order of magnitude of the telescope, which was manufactured at the Leningradsky Astrophysical Observatory. The scientific authority of Natalia Persiyanova was very high. She was her public authority. She not only taught students and trained astronomical wisdom, but also became an advisor in worldly affairs. Contact established during common work continued to exist in correspondence. When a scientific conference was held with Natalia Persiyanova, discussions in her very close were even more active than in and around the conference room.

Although L.D. Kostina and N.R. Persiyanova each had their own research topics of interest to them, being members of the same Pulkovsko laboratory group, they naturally had many general publications and reports at conferences (and in those years astronomical and special periodical place in our much more often than now), based primarily on observations with ZTF. Almost two-thirds of these articles are on papers on the study of the ZTF latitude variations, the results of the analysis of non-polynomial variations in latitude observations, and the improvement of the catalog of coordinates of latitudinal stars.

Very interesting was the joint cooperation of L.D. Kostina and V.I. Sakharov, Natalia Persiyanova, and V.I. Sakharov, who was the leader of the group, too. They were interested in the study of the phase changes of this oscillation, in particular, around 1925 and drew attention to the fact that the neglecting the phase variations could lead to constructing of a wrong period of the wave. The value of the period of the ZTF wave is 180 ± 0.02 yr obtained by them corresponds to the theoretical estimation for the second model of the Earth's interior developed by M.S. Molotkov (elastic mantle, liquid core with a solid inner core [2]). The authors proposed the theory of the phenomenon as a result of the process of secular tide variations.

Analyzing the maximum amplitudes, they estimated the local low-frequency in the period of the Chandler wobble of 43.8 yr. Their assumption is that the maximum of the third tidal cycle will fall in 1984 turned out to be close to the truth (the maximum was observed in the early 1990s).

Very interesting was also the joint work of Natalia Persiyanova and N.P. Godishov. In this study of the main components of the pole motion, the method of sequential separation of the pole contributed to was used with much better skill and in the region of the maximum spectral function, which was then used by many authors. In the study of the Chandler oscillation, the period of 44 yr was found, which corresponds to the conclusions of Sakharov and Persiyanova.

Over their nearly half-century scientific and, in particular, observing lives, Lidia Kostina and Natalia Persiyanova observed 66071 high-precision latitudes, distributed over several years. Natalia Persiyanova observed for over 345 days--about a whole year! If one takes into account also auxiliary, but necessary observations, this will be even more than a year. During preparation of this presentation, materials Pulkovsko laboratory archive was used [3-6].

References
3. Pulkovsko Observatory archive, f. 1, op. 2, d. 861, l. 34-97 (Personal file of Natalia Persiyanova).
5. Pulkovsko Observatory archive, f. 1, op. 2, d. 196, l. 28-235 (Personal file of Lidia Kostina).
6. Pulkovsko Observatory archive, f. 1, op. 2, d. 106, l. 26. (Photo album "150 years of Pulkovsko Observatory").