

**KINEMATIC ANALYSIS OF THE MILKY WAY
BY GAIA EDR3 DATA**

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In this work, the kinematic analysis of a sample of red giants with radial velocities from third release of the GAIA space mission we carried out. Twelve kinematics parameters of the Ogorodnikov-Miln model were determined for stellar systems with the radius of 1 kpc that are located along the direction from the galaxy center to the anticenter. The range of the samples is 0-14 kpc, with a step of 0.25 kpc, in the θ angles in the range of 135-235 degrees, where 180 is the direction of the galaxy center - the Sun - the anticenter. In this range, bases on the analysis and combinations of some model parameters the information characterizing the behavior of stellar velocity field in different parts of the studied galaxy region, as well as the rotation curve of the Galaxy at different θ angles were obtained. The determined kinematic parameters in the Solar vicinity with a radius of 1 kpc are in good agreement with the results of earlier studies of the solar neighborhood.