



## **Two dimensional model of the long period Variations of the Galactic Cosmic Ray Intensity**

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We solve numerically two-dimensional (2-D) Parker's Transport Equation describing the long period variations of the Galactic Cosmic Ray (GCR) intensity; in the model are including diffusion, convection, drifts, adiabatic cooling and the changes of the exponent  $\nu$  of the power spectral density (PSD) of the interplanetary magnetic field turbulence as a time dependent parameter. A comparison of the results of solution with the neutron monitors experimental data shows a good compatibility of the proposed model of the long period modulation of the GCR intensity.