

## ANOMALOUS DIFFUSION OF THE COSMIC RAY: STEADY-STATE SOLUTION

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We consider propagation of galactic cosmic rays in the framework of anomalous diffusion model. Steady-state solution of the fractional diffusion equation describing cosmic rays propagation is found. We show that for point source with inverse power spectrum  $\sim E^{-p}$  and the anomalous diffusivity  $D \sim E^\delta$  the spectral exponent of cosmic rays in two different regimes (subdiffusion and superdiffusion) turns out to be equal  $(p + \delta)$ . Taking into account that such exponent describes the cosmic ray spectrum in the time-dependent case at  $E \gg 3 \cdot 10^{15} eV$ , the possibility to use the steady-state approach to cosmic rays study is discussed.