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Anisotropy of the cosmic rays in anomalous diffusion model

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Abstract. Theoretical study of the cosmic ray anisotropy due to near sources is made. The anisotropy amplitude is calculated in the framework of anomalous diffusion model. The sensitivity of the anisotropy to variation of basic parameters of diffusion model is discussed. Assuming that the arrival of particles from nearest source is a main reason for cosmic ray anisotropy in the interstellar medium, the developed model allows us to explain the observed increase of the anisotropy in the energy region $10^{11} \div 10^{17}$ eV.