

Cosmology of a Diffusion Vector Field

[B. F. C. S. V. Khlopov](#), [B. A. Kravchuk](#), [S. A. A. Semenov](#)

Abstract

An effective manifold is a collection of diffusive vectors which are invariant under diffusive transformation on a single space-time manifold. We consider a diffusion vector field over a single space-time manifold in the framework of the "Ehrenreich-Bloch-DeWitt-Pomeron theory". We obtain the density matrix of the diffusive vector field, and compute the local integrability of the theory.