

# Influence of magnetic stochastic drift on ion diffusion in magnetic turbulence

**M. Negrea and I. Petrisor**

Association Euratom-MEdC, Romania, Department of Physics,  
University of Craiova, 13 A.I.Cuza str., 200585 Craiova, Romania

**B. Weyssow**

Association Euratom-Etat Belge, Physique Statistique - Plasmas,  
Université Libre de Bruxelles, Campus Plaine, Bd. du Triomphe, 1050 Bruxelles, Belgium

## Abstract

The influence of the magnetic stochastic drift for an ion was studied in the framework of the decorrelation trajectory method. Specific decorrelation trajectories in a given subensemble and diffusion coefficients were analyzed for different values of the thermal Kubo number and a fixed value of the magnetic turbulence. The trapping effect is present if the thermal Kubo number is non-zero.