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Abstracts of Short Communications and Posters

Section:

12. Probability and Statistics

1991 MS Classification: 60, 62, 35, 82
Leonenko, Nikolai, University of Kyiv, Ukraine
Parameter identification for stochastic Burgers flows via parabolic rescaling
We present a systematic study of classical statistical inference problems(parameter identification and hypothesis testing) for random fields arising as solutions of the nonlinear diffusion equation with random initial data(the Burgers' turbulence problem). The statistical tools take advantage of the underlying dynamics governed by Burgers' equation. These results is joint work with W. Woyczynski (Case Western Reserve University, Cleveland, Ohio)
Reference: Leonenko, N. N., Limit Theorems for Random Fields with Singular Spectrum, Kluwer Academic Publishers (1998) Dordrecht, to appear