ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

12. Probability and Statistics

1991 MS Classification: 60,35
Doudnikova, Tatiana, Moscow State Institute of Steel and Alloys, Russia
On Ergodicity and Statistical Stabilization in Wave Equations with Mixing
We consider wave and Klein-Gordon equations in the whole space R^n. We assume initial data to be space-homogeneous random functions with finite mean density of energy. Moreover, we assume that initial data satisfy mixing condition of Ibragimov - Linnik type. We prove that evolution is mixing and ergodic in time with respect to some stationary measure. The results are inspired by mathematical problems of statistical physics. Reference: T. V. Dudnikova, A. I. Komech, *Theory Probab. Appl.***41** (1996), no.3 436.