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Diffusion on p -adic numbers. (English) [Zbl 0826.46069](#)

Itô, K. (ed.) et al., Gaussian random fields. Proceedings of the third Nagoya Lévy seminar, held in Nagoya, Japan, 15-20 August, 1990. Singapore: World Scientific. Ser. Probab. Stat. 1, 86-99 (1991).

We give a direct construction of a random walk with continuous time and state space the field of p -adic numbers.

For the entire collection see [\[Zbl 0812.00031\]](#).

MSC:

- [46S10](#) Functional analysis over fields other than \mathbb{R} or \mathbb{C} or the quaternions; non-Archimedean functional analysis
- [46N55](#) Applications of functional analysis in statistical physics
- [60J60](#) Diffusion processes
- [60G50](#) Sums of independent random variables; random walks

Cited in **1** Review
Cited in **16** Documents

Keywords:

random walk with continuous time; state space