

[Iscoe, I.](#); [Marcus, M. B.](#); [McDonald, D.](#); [Talagrand, M.](#); [Zinn, J.](#)

Continuity of ℓ^2 -valued Ornstein-Uhlenbeck processes. (English) Zbl 0699.60052

Ann. Probab. 18, No. 1, 68-84 (1990).

The authors consider the almost-sure continuity of the following ℓ^2 -valued Ornstein-Uhlenbeck process given by

$$dX_t = AX_t dt + \sqrt{2\alpha} dB_t,$$

where A is a positive, self-adjoint operator on ℓ^2 , B_t is a cylindrical Brownian motion on ℓ^2 and α is a positive diagonal operator on ℓ^2 . They give a simple sufficient condition for the almost-sure continuity of X_t in ℓ_2 and show that it is quite sharp. Furthermore, they obtain necessary and sufficient conditions in special cases.

Reviewer: [R.Curtain](#)

MSC:

[60H20](#) Stochastic integral equations

[60G15](#) Gaussian processes

[60G17](#) Sample path properties

Cited in **20** Documents

Keywords:

[stochastic evolution equations](#); [almost-sure continuity](#); [Ornstein- Uhlenbeck process](#)

Full Text: [DOI](#)