



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Mercoledì 26 ottobre 2016
ore 14:30

Scuola Normale Superiore
Pisa
Aula Bianchi

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terrà un seminario dal titolo:

“A new regularity result for the Kolmogorov equation for SPDEs with multiplicative noise”

Abstract:

In this talk we present a new regularity result on the solution of the Kolmogorov equation associated to a stochastic parabolic PDE of the type:

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$$du = (\partial_{xx} u + f(u))dt + \sigma(u) dW$$

\$\$

with boundary conditions and initial data. We prove a new estimate on the second differential of the solution

of this Kolmogorov equation. This is crucial for the study of the weak order of numerical scheme and we apply this to a time discretization of the equation.

The main tool is a formula for the second differential which is obtained thanks to Malliavin calculus.

This is a joint work with C.E. Bréhier.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali