1161-60-96Fabrice Baudoin, Maria Gordina and Tai Melcher* (melcher@virginia.edu).Quasi-invariance for generalized Kolmogorov diffusions in infinite dimensions.

The Kolmogorov diffusion stands as one of the simplest and most natural examples of hypoelliptic diffusions, that is diffusions whose end point distribution is smooth with respect to Lebesgue measure. We consider different infinitedimensional versions of these diffusions and show that they retain smoothness properties. These results are attained by establishing uniform control over coefficients appearing in certain functional analytic inequalities for approximating finite-dimensional diffusions.

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