

## **An analytic approach to infinite-dimensional continuity and Fokker–Planck–Kolmogorov equations**

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**Abstract.** We prove a new uniqueness result for solutions to Fokker-Planck-Kolmogorov (FPK) equations for probability measures on infinite-dimensional spaces. We consider infinite-dimensional drifts that admit certain finite-dimensional approximations. In contrast to much of the previous work on FPK-equations in infinite dimensions, we include cases with non-constant coefficients in the second order part and also include degenerate cases where these coefficients can even be zero. A new existence result is also proved. Some applications to FPK equations associated with SPDE's are presented.

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