

Estimates for the semigroup associated with Bernstein-Schnabl operators

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ABSTRACT.

We consider a differential operator of the form $Au(x) = \alpha(x)u''(x)$, $0 \leq x \leq 1$. Under suitable assumptions, it generates a semigroup $(T(t))_{t \geq 0}$ which can be approximated by iterates of the Bernstein-Schnabl operators. We obtain quantitative results concerning the behaviour of $T(t)$ when $t \rightarrow 0^+$ and $t \rightarrow +\infty$.

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