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On exit laws for subordinated semigroups by means of \mathcal{C}^1 -subordinators

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Abstract: We study the integral representation of potentials by exit laws in the framework of sub-Markovian semigroups of bounded operators acting on $L^2(m)$. We mainly investigate subordinated semigroups in the Bochner sense by means of \mathcal{C}^1 -subordinators. By considering the one-sided stable subordinators, we deduce an integral representation for the original semigroup.

Keywords: sub-Markovian semigroup, potential, Bochner subordination, exit law, \mathcal{C}^1 -subordinator, one-sided stable subordinator

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