



Abstract Bismut's Way of the Malliavin Calculus for Large Order Generators on a Lie Group ⁺

Rémi Léandre

Département de mathématiques, Université de Bourgogne-Franche-Comté, 25030 Besançon, France; Remi.leandre@univ-fcomte.fr

+ Presented at Symmetry 2017—The First International Conference on Symmetry, Barcelona, Spain, 16–18 October 2017.

Published: 5 January 2018

We give an adaptation of the Malliavin Calculus of Bismut type in order to show that an operator of big order on a compact connected. Lie group is such that the associated semi-group has an heatkernel. By mixing Wentzel-Freidlin estimates which were establised by us for non-markovian semigroups and the Malliavin Calculus, we deduce logarithmic estimates of the heat-kernel in small time. We use deeply the symmetry of the group in the proof of the theorem.



© 2018 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).