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AZÉMA MARTINGALES WITH DRIFT

K. R. Parthasarathy

Abstract: Pursuing the earlier work of Emery [1], Meyer [2], [3] and the author [4] it is shown that Azéma martingales starting from a varying initial point on the line constitute an Evans-Hudson flow in the framework of quantum stochastic calculus. A new transformation property of Azéma martingales is established. It turns out, rather remarkably, that the Azéma martingales and a class of their Weyl perturbations satisfy the same Itô's formula but, in the vacuum state, have very different asymptotic statistical properties as time increases to infinity.

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