

[Lyons, Terry; Zeitouni, Ofer](#)

Conditional exponential moments for iterated Wiener integrals. (English) Zbl 0961.60053
[Ann. Probab. 27, No. 4, 1738-1749 \(1999\)](#).

Authors' summary: We provide sharp exponential moment bounds for (Stratonovich) iterated stochastic integrals under conditioning by certain small balls, including balls in certain Hölder-like norms of exponent greater than $1/3$. The proof uses a control of the variation of the Lévy area, under conditioning. The results are applied to the computation of the Onsager-Machlup functional of diffusion processes with constant diffusion matrix.

Reviewer: [Tomasz Bojdecki \(Warszawa\)](#)

MSC:

[60H05](#) Stochastic integrals

[60H10](#) Stochastic ordinary differential equations (aspects of stochastic analysis)

[60J60](#) Diffusion processes

Cited in **3** Documents

Keywords:

[iterated Wiener integrals](#); [Lévy area](#); [Onsager-Machlup functional](#)

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