



# Trends to equilibrium for a class of relativistic diffusions

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(Submitted on 29 Jun 2011)

We address the question of the trends to equilibrium for a large class  $C$  of relativistic diffusions. We show the existence of a spectral gap using the Lyapounov method and deduce the exponential decay of the distance to equilibrium in  $L_2$ -norm and in total variation. A similar result was obtained recently in [arXiv:1009.5086](#) for a particular process of the class  $C$ .

Comments: 10 pages

Subjects: **Probability (math.PR)**; Mathematical Physics (math-ph)

MSC classes: 60J60, 83A05, 26D10

Cite as: [arXiv:1106.5867](#) [math.PR]

(or [arXiv:1106.5867v1](#) [math.PR] for this version)

## Submission history

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