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Diffusion limit of Lévy-Lorentz gas is Brownian motion

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Highlights

- we analyze the asymptotic behaviour of Levy-Lorentz gas
- We derive the diffusion limit of the studied process (functional convergence in the Skorokhod topology).
- We extend the Skorochod space in order to handle the analyzed model
- We show that the resulting limiting process is the standard Brownian motion.
- We verify the result using Monte Carlo simulations

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