

A Gaussian Oscillator

Krzysztof Burdzy, *University of Washington*
David White, *University of Washington*

Abstract

We present a stochastic process with sawtooth paths whose distribution is given by a simple rule and whose stationary distribution is Gaussian. The process arose in a natural way in research on interaction of an inert particle with a Brownian particle.

Full text: [PDF](#) | [PostScript](#)

Pages: 92-95

Published on: October 6, 2004

Bibliography

1. S. Ethier and T. Kurtz *Markov processes. Characterization and convergence.* John Wiley and Sons, Inc., New York, 1986. [Math. Review 88a:60130](#)
2. F. Knight, On the path of an inert object impinged on one side by a Brownian particle. *Probab. Theory Related Fields* 121, (2001) 577-598. [Math. Review 2002i:60148](#)
3. D. White, Processes with inert drift. Ph.D. Thesis, University of Washington (forthcoming)

Research Support Tool

[Capture Cite](#)
[View Metadata](#)
[Printer Friendly](#)

▼ [Context](#)

[Author Address](#)

▼ [Action](#)

[Email Author](#)
[Email Others](#)

