

SEMINARIO

CONJUNTO EDP & Núcleo Milenio de Modelamiento Estocástico

Expositor

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Título

On Kac's model, ideal Thermostats, and finite Reservoirs

Abstract:

In 1956, Mark Kac introduced a stochastic model to derive a Boltzmann-like equation. Like the space-homogeneous Boltzmann's equation, Kac's equation is ergodic with centered Gaussians as the unique equilibrium state. In this talk, I will introduce Kac's model, the thermostat used in [1] to guarantee exponentially fast convergence to equilibrium, and sketch the result in [2] how this infinite thermostat can be approximated by a finite but large reservoir.

References:

- [1] Bonetto, F., Loss, M., Vaidyanathan, R.: J. Stat. Phys. 156(4), 647–667 (2014)
- [2] Bonetto F., Loss, M. Tossounian, H. Vaidyanathan, R. Comm. Math. Phys. 351 (2017)

Lunes 03 de Diciembre a contar de las 17:00 hrs, en la Sala E214 del Depto de Ingeniería Eléctrica, ingreso por Calle Tupper o Beauchef 850.