



DEPARTAMENTO DE  
ANÁLISIS MATEMÁTICO Y  
MATEMÁTICA APLICADA



Facultad de Ciencias  
MATEMÁTICAS



Instituto de  
Matemática  
Interdisciplinar

# SEMINARIO DE ANÁLISIS MATEMÁTICO Y MATEMÁTICA APLICADA

**Yingfei Yi**

**University of Alberta, Canada  
& Jilin University, China**

## **Quasi-Stationary Distributions**

Quasi-stationary distributions (QSDs) are those almost invariant to a diffusion process over exponentially long time. Representing important transient stochastic dynamics, they arise frequently in applications especially in chemical reactions and population systems admitting extinction states. This talk will present some rigorous results on the existence, uniqueness, concentration, and convergence of QSDs along with their connections to the spectra of the Fokker-Planck operators.

**Organized by: Departamento de Análisis Matemático y Matemática Aplicada and Instituto de Matemática Interdisciplinar (IMI)**

**Date: Wednesday, January 24, 2024, 13:00h**

**Place: 222**

**Facultad de CC. Matemáticas, UCM**