

Centro de Investigação em Matemática e Aplicações  
Departamento de Matemática  
Programa de Doutoramento em Matemática

## Seminário/Seminar

06/03/2024, CLAV-128, 14h30

Zoom address: <https://videoconf-colibri.zoom.us/j/98650312699>

## Numerical Methods for Option Pricing: Black-Scholes and Beyond

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**Abstract:** This seminar will cover numerical methods used for pricing European and American options, with a focus on the Black-Scholes model and its generalizations. It will explore practical applications of numerical simulations, using finite difference and finite element methods, and Monte Carlo simulations. The presentation will also discuss generalizations of the Black-Scholes model that account for more realistic market conditions, such as stochastic volatility, interest rate variations, and jumps in asset prices. The seminar aims to empower participants with insights into the theoretical foundations and comparative evaluations of various numerical methods.

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