UNIVERSIDADE DE ÉVORA

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

Seminar

Wednesday, 23rd April 2025, CLAV 157, 16h30 UTC (Lisbon)

Google Meet link: https://meet.google.com/gbw-ftso-vsd

Open Meeting: **no required password**

Applications of optimal control theory: from Newton's minimal resistance problem to epidemiological models

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Abstract: In this talk we explore the diverse applications of optimal control theory, beginning with Newton's Minimal Resistance Problem and extending to classical and modern epidemiological models. We will discuss the mathematical foundations of optimal control and demonstrate its utility in solving classical mechanics problems. Additionally, we will illustrate how these principles are applied to model and control the spread of infectious diseases, showcasing the versatility and impact of optimal control theory in both historical and contemporary contexts.

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