

COLÓQUIO DE MATEMÁTICA

Quarta-feira, 20 de abril de 2022 às 16h00

The Adjoint Method in Calculus of Variations

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Ciências
ULisboa

Matemática

*Convívio antes do Colóquio na sala dos docentes do C6,
com café, chá e bolos (15h45 até às 16h00)*

The Adjoint Method in the Calculus of Variations is being used in a rigorous framework in optimization problems governed by partial differential equations since the eighties, with the papers of J. Céa, F. Murat and L. Tartar. The author proposes a review of several applications of the Adjoint Method in the Calculus of Variations that she has been studying during the last twenty eight years of scientific research in the domain of structural optimization of elastic structures. Applications of the Adjoint Method to control problems, shape optimization, topology optimization and optimization of eigenvalues and eigenmodes will be discussed.