

SEMINÁRIO

23 de julho 2024 | 14:00 | sala 6.2.52

An example involving shape
optimization and the adjoint method

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ABSTRACT:

We consider a 2D Poisson problem on a domain whose boundary depends on parameters. We seek for the values of the parameters minimizing or maximizing certain integral quantities. Derivative-based optimization methods are used. Computing the derivative of such functionals is a difficult task, involving shape optimization techniques and the adjoint method. We present numerical examples using the maniFEM library.

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