

# COLLOQUIUM DE MATEMÁTICA

## Mimetic Discretization Methods

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Mimetic discretizations or compatible discretizations have been a recurrent search in the history of numerical methods for solving partial differential equations with variable degree of success.

Loosely speaking, "mimetic" or "compatible" algebraic methods have discrete structures that mimic vector calculus identities and theorems. Here, we present theoretical aspects for a mimetic method based on the extended Gauss Divergence Theorem as well as examples using this method to solve partial differential equations using the Mimetic Operators Library Enhanced (MOLE).

#### 9 July, 16:00 - 17:00

Instituto Superior Técnico, Campus Alameda Mathematics Building Room 3.10

www.math.tecnico.ulisboa.pt/seminars/colloquium/

