



**CHAIR OF  
COMPUTATIONAL  
MATHEMATICS**  
DeustoTech



## Aim of the Chair

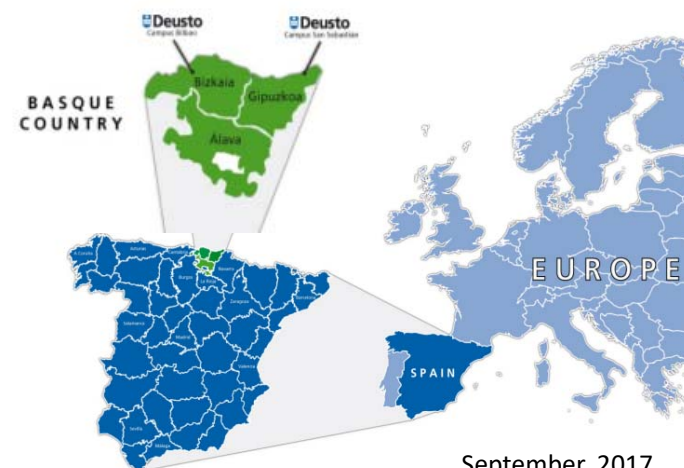
The Chair of Computational Mathematics of DeustoTech (Deusto Foundation), in Bilbao, Basque Country (Spain), aims to develop an active research, training and outreach agenda in various aspects of Applied Mathematics. In particular, the Chair is committed with the development of ground-breaking research in the areas of Partial Differential Equations, Control Theory, Numerical Analysis and Scientific Computing; key tools for technological transfer and for the interaction of mathematics with other scientific disciplines such as biology, engineering, earth and climate sciences.



**Enrique Zuazua**  
Chair's Director  
Professor of UAM

Computational Mathematics, inspired in the depth of Mathematics and the strength of Computational Sciences, aims to develop the scientific tools needed to interact with other scientists and R&D agents.

The Chair of Computational Mathematics of the University of Deusto, in Bilbao, at the heart of Basque Country, offers the right facilities, atmosphere and environment to develop a multidisciplinary research program, combining Mathematical Modelling and Control and Computational Mathematics, in cooperation with a rich network of computer scientists and engineers.



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**European Research Council**  
Established by the European Commission

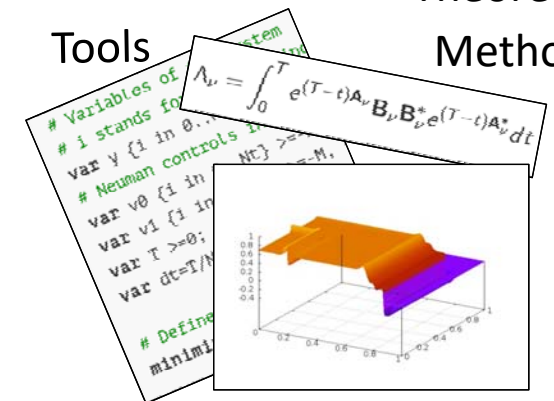
**ERC Advanced Grant DyCon** project aims at making a breakthrough contribution in the broad area of **Control of Partial Differential Equations (PDE)** and their numerical approximation methods by addressing key unsolved issues appearing systematically in **real-life applications**.

This project identifies and focuses on six **key topics** that play a central role in most of the processes arising in applications, but which are still poorly understood:

- Control of parameter dependent problems
- Long time horizon control
- Control under constraints
- Inverse design of time-irreversible models
- Memory and hybrid PDE/ODE models
- Finite versus infinite-dimensional dynamical systems

Numerical  
Tools

Theoretical  
Methods



Computational  
Platform

**DyCon** is a joint initiative of **DeustoTech** (Bilbao) and the Department of Mathematics of **Universidad Autónoma de Madrid (UAM)**.



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