ERC – ADVANCED GRANT "DYCON – DYNAMIC CONTROL"

Company Description

Fundación Deusto, University of Deusto

Information

Deadline: 2021-08-08
Country: Basque Country
Category: Academia
City: Bilbao
Province: Bizkaia

Company

Universidad de Deusto

Main functions, requisites & benefits

Main functions

The Chair of Computational Mathematics led by E. Zuazua of the Fundación Deusto in Bilbao (Basque Country, Spain) offers a Postdoctoral Position to carry out Mathematical and Computational Research, with excellent facilities within a world-wide academic and industrial-technological network. This position is funded by the European Research Council (ERC) Advanced Grant "DYCON – Dynamic Control". Research activities will be focused in some of the priority lines of the project, that will be identified accordingly to the candidate's profile. The chosen Postdoc Researcher will carry out Mathematical and/or Computational Research, with excellent facilities and world-wide academic and industrial-technological network, in Fundación Deusto and University of Deusto (Bilbao – Basque Country – Spain) in some of the priority lines of the project, that will be identified accordingly to the candidate's profile. Main Research Field: Partial Differential Equations. Control Systems. Numerical Analysis. Scientific Computing. Estimated Period: 9 months from January 2022 (or earlier if availability allows). Job Summary The European Research Council (ERC) Advanced Grant "DYCON – Dynamic Control", coordinated by Enrique Zuazua at DeustoTech (University of Deusto, Bilbao – Basque Country – Spain), aims to develop a multifold research agenda in the broad area of Control of Partial Differential Equations (PDE) and their numerical approximation methods to contribute with new key theoretical methods and results, and to develop the corresponding computational software. This project identifies six key topics: Control of parameter dependent problems. Long finite time horizon control. Control under constraints. Inverse design of time-irreversible models. Memory models and hybrid PDE/ODE models. The links between finite and infinite-dimensional dynamical systems. The chosen Postdoc Researcher will carry out mathematical and/or computational research on some of the main scientific priorities of DYCON in a multidisciplinary and international environment with excellent facilities.

Requisites

PhD Thesis obtained or to be defended within 2021 in Mathematics, Physics, Informatics, Engineering or closely related areas, with emphasis on Partial Differential Equations, Control theory, Numerical Analysis and/or Scientific Computing. Able to work in a highly motivated environment. Strong team working & communication skills. Good written English skills. Driven, independent personality.

Benefits

A temporary contract in Bilbao, University of Deusto, at a stimulating work environment within a highly motivated multidisciplinary team. Possibilities to continue a Research Career depending on performance.