Curriculum vitae: Enrique Zuazua (Spain, September 28, 1961)

Married (Magaly Roldán), two daughters (Oihane (29) & Ainara (15))

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Current positions

2019- Chair of Applied Analysis - Alexander von Humboldt Professorship, University FAU of Erlangen-Nürnberg

2016- Part Time: Distinguished Senior Researcher and Director of the Chair in Computational Mathematics, Deusto Foundation, Bilbao, Basque Country, Spain.

2001- Part Time: Professor, Applied Mathematics, Universidad Autónoma de Madrid, Spain.

Education

1988 PhD in Mathematics, Université Pierre et Marie Curie, Paris

1987 PhD in Mathematics, University of the Basque Country, UPV/EHU, Bilbao, Spain

1985 Numerical Analysis (DEA/Master), Université Pierre et Marie Curie, Paris

1984 Bachelor Degree in Mathematics, UPV/EHU, Bilbao, Spain.

Domains of Expertise: Control Theory, Numerical Analysis, Partial Differential Equations (PDE), Optimal Design, Data Sciences and Industrial Transfer.

Our research work had a high impact on the interplay of these disciplines of Applied Mathematics, having led to new analytical results and to the development of novel numerical methods preserving the asymptotic and control properties of PDEs (WoS h-index: 42). These analytical and numerical contributions have been implemented successfully in new computational software, often in a data driven context, applied in a number of industrial projects (optimal shape design in aeronautics and the management of water resources and electrical networks, in particular).

Impact Factor

Google Scholar: Number of Citations: 17687; h-Index: 69

ISI WoS: Number of entries: 309; Number of citations 7439; h-Index: 42. MathSciNet: Number of Citations: 7125 times. Number of Publications: 351

Fellowships and awards

2020 "Txopitea eta Pakea", Distinction of the Eibar City Hall, Basque Country, Spain 2018 Alexander von Humboldt Professor, FAU Erlangen-Nuremberg (3.5 M€).

2017 Marie Skodowska-Curie Innovative Training Networks, ConFlex (Control of

flexible structures and fluid-structure interactions), (UAM: 287.872,96 €)

2017 Invited profile to "Arbolmat", El Árbol de las Matemáticas / The tree of

Mathematics, UNIVERSIA, http://www.arbolmat.com/enrique-zuazua/

2016-2020 Agence Nationale de la Recherche, France: ICON Grant (600 K€).

2016-2022 ERC Advanced Grant DyCon: Dynamic Control (2 M€).

2015- Ambassador of Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

2015- Member of Academia Europaea

2015-2020 High-End Foreign Teacher of the University of Sichuan, Chengdu, China

July 2014 <u>Doctor Honoris Causa</u>, Université de Lorraine, France

2014 - 2015 Humboldt Research Award 2013, Univ. of Erlangen-Nürenberg, Germany

2014-2017 Severo Ochoa Excellence Award to BCAM, MINECO, Spain 2013 - 2014 CIMI Excellence Chair, Toulouse, France (Spring Semester) "Research in Paris" Award, Paris City Hall (Fall Semester)

2010 - 2015 ERC Advanced Grant NUMERIWAVES (1.6 M€)

2008 Best article Prize. Ann. Inst. H. Poincaré, Anal. Non-Linéaire.

2007 <u>Julio Rey Pastor Spanish National Prize</u> in "Mathematics and Technologies of

Information and Communication".

2007 - Full member of "Jakiunde", the Basque Academy for Science, Arts and Letters.

2006 Science and Technology Euskadi Prize of the Basque Government.

2004 "Highly Cited Researcher" by the ISI Institute (Thomson)

2003 & 2000 IV & I SEMA (Soc. Española Mat. Aplicada) Prize for Mathematical Dissemination.

1987 Extraordinary Prize for PhD Theses in Sciences, UPV/EHU, Bilbao, Spain.

Extraordinary Prize for Graduate Studies in Mathematics, UPV/EHU, Bilbao, Spain. Supervision of graduate students and postdoctoral fellows. 26 PhD, all holding academic or industrial research positions in Chile, China, Mexico, US, Romania, Spain...: [http://genealogy.math.ndsu.nodak.edu/id.php?id=88528]. Mentoring of over 40 postdocs (all holding academic or industrial research positions in Spain, France, Italy, UK, USA, China,...). Advisor of 15 Master Thesis a network of Research and IT.

Teaching activities. Continuous teaching activities since 1987 at all levels (graduate and postgraduate, doctoral and research courses,...).

Institutional responsibilities

2016- Director of the Chair in Computational Mathematics, Deusto Foundation, Bilbao, Spain

2012 – 2013 Director of BCAM Chair in PDE, Control and Numerics, BCAM, Spain

2008 – 2012 Founding Scientific Director, BCAM, Bilbao, Spain.

2001 - 2005 Manager of the Spanish Mathematics Program of the National Research Plan

1996 - 1999 Chairman of the Department of Applied Mathematics at UCM.

Commissions of trust

- 2019: Selection Committee, Kuwait Prize 2019-Fundamental Sciences
- 2017 2018: Member of the Evaluation Panel of the call Synergy Grants 2018 of the European Reseach Council (ERC).
- Chairman of the Panel "Control and Applications" of ICIAM2011, Beijing, China
- Member of the Panel "Control and Optimization" of ICM2010, Hyderabad, India.
- Member of the International Program Committee, ICM 2006, Madrid, Spain.
- Chairman of the Scientific Committee of CIMPA, Nice, France [2009-2016].
- Scientific Council of CERFACS, Toulouse, France [2006→]
- Scientific Council of "Foundation Mathématique Jacques Hadamard", Paris-Saclay [2012→]
- Scientific Governing Board of CIMI, Toulouse, France, [2012→]
- Member of the "IFAC TC on Distributed-Parameter Systems" [2012→]
- Member of the ESF College of Expert Reviewers [2016→]
- Member of the IMU Circle [2014→]
- Funding Agencies: CNRS (France); AERES (France); ANR (France); DFG (Germany);
 Irish Research Council, Institut Universitaire de France, FRS/FNRS (Belgium), NSF (USA), NSC (Poland), CONYCIT (Chile),...

Editorial Boards

Journals: Editor in Chief (EiC) of "Mathematical Control and Related Fields". Member of the Editorial Board of: Stientific Reports - Nature, Journal de Mathématiques pures et appliquées, Mathematical Models and Methods in Applied Sciences, Journal of Differential Equations, Numerische Mathematik, Systems and Control Letters, Asymptotic Analysis, Journal of Optimization Theory and Applications, ESAIM: COCV, Pacific Journal of Math-for-Industry, Acta Applicandae Mathematicae, Networks and Heterogeneous Media, etc.

Book series: Mathématiques et Applications (SMAI-Springer); Modelling, Simulation and Applications (Springer); Coordinator of the BCAM – SpringerBriefs Subseries, etc.

Honorary Lectures: Lecturer of a number of honorary addresses such as: "The Lezioni Guido Castelnuovo", Rome, 2002; "Edinburgh Mathematical Society", 2005; "Le modèle et l'algorithme", INRIA, Rocquencourt, 2008; "The von Misses Lecture", Humboldt Univ., Berlin, 2008; "Flow control in the presence of shocks", Giornada INDAM, Torino, 2009; "Celebrating Sciences", Nonlinear Physics Laboratory, UK, 2011; "Science et Société", Nancy, France, 2014; Grandes Conférences Publiques du CRM, Montreal, 2016; Perspectivas Matemáticas, IM-UNAM, México, 2016, Closing lecture of the 2017th edition of "Ciencia en Acción (Science in Action)", Eibar, Basque Country, Spain, 2017, University of Pittsburgh Michalik Distinguished Lecture Series, 2019; Natural Sciences Distinguished Lecture, Institute of Natural Sciences, Shanghai Jiao Tong University, 2020; Distinguished Lecture for HKSIAM, Hong Kong, 2020.

Monographic Lectures and Advanced Courses: Monographic research lectures Algeria, Brazil, Chile, China, Egypt, Finland, France, India, Italy, Japan, Morocco, Mexico, Poland, Portugal, Spain, Turkey, Venezuela and Colombia.

Outreach Activities: Public awareness activities collected on the website "enzuazua"