



UNIVERSITÄT ERLANGEN-NÜRNBERG

NATURWISSENSCHAFTLICHE FAKULTÄT

## Ph.D. and Postdoc positions

A recently established Chair in Applied Analysis at the Department of Mathematics of the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), in Germany, co-funded by an Alexander von Humboldt Foundation (AvH) Professorship, led by Enrique Zuazua, is looking for outstanding candidates to fill several

## Ph.D. and Postdoctoral positions.

## **Department of Mathematics**

**Chair in Applied Analysis** (Alexander von Humboldt-Professorship)

Prof. Enrique Zuazua

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Our group, in the broad area of Applied Mathematics, develops and applies methods of Mathematical and Computational Mathematics to model, understand, design and control the dynamics of various phenomena arising in the interface of Mathematics with Engineering, Physics, Biology and Social Sciences.

We are welcoming applications by young and highly motivated scientists to contribute to this exciting joint AvH-FAU effort. Possible research projects include but are not limited to:

- Analysis of Partial Differential Equations (PDE)
- Control of diffusion models arising in Biology and Social Sciences
- Modeling and control of multi-agent systems
- Hyperbolic models arising in traffic flow and energy transport.
- Fractional PDE
- Optimal design in Material Sciences
- Micro-macro limit processes
- The interplay between discrete and continuous modelling in design and control
- The emergence of turnpike phenomena in long-time horizons
- Inversion and parameter identification
- Development of new computation tools and software

We are looking for excellent candidates with expertise in the areas of applied mathematics, PDE analysis, control theory, numerical analysis and computational mathematics who enjoy interdisciplinary work.

This newly established Chair will also contribute to the development of a new Center of Research at FAU, in the broad area of "Mathematics of Data", conceived as a highly visible interdisciplinary research site, an incubator for future collaborative research grants and a turntable for the key research priorities of FAU, anchored in Mathematics and Computer Science. The recruited candidates will have the opportunity to participate in this challenging endeavor.

Applications including cover letter, curriculum vitae, list of publications, and statement of research interests should be submitted via e-mail as a single pdf file. Along with submitting your application, please also arrange for at least two reference letters to be sent. Application documents, recommendation letters as well as any inquiries about the positions should be sent to Prof. Enrique Zuazua (positions-aa@math.fau.de). Applications will be accepted until the positions are filled.

FAU is a member of "The Family in Higher Education Institutions" best practice club and also aims to increase the number of women in scientific positions. Female candidates are therefore particularly encouraged to apply. In case of equal qualifications, candidates with disabilities will take precedence. For more detailed information about the group positions please visit: https://www.math.fau.de/