

Prof. JAVIER JIMÉNEZ SENDÍN

Aeronautical Engineer (1969) and Doctor in Engineering (1975) by the School of Aeronautical Engineering at Madrid. Master in Aeronautics (1970) and Ph.D. in Applied Mathematics (1973) by the California Institute of Technology, Pasadena, Ca. (USA).

Emeritus and research professor of Fluid Mechanics at the School of Aeronautics of the Polytechnic University of Madrid. He has been professor of Mechanics at the Ecole Polytechnique, Palaiseau (France) and senior research fellow and visiting professor at the Centre for Turbulence Research, Stanford University and NASA Ames Res. Centre, Ca. (USA). Research scientist at the IBM Madrid Scientific Centre (1975-1990).

His research interests include: the physics of turbulence and hydrodynamic transition, numerical simulation of turbulence and combustion, vortex dynamics, computer graphics for the analysis of experimental results, flow at low Reynolds numbers, numerical simulation of transonic flows (1986-92), turbulent mixing (1976-91), digital image processing and its applications (1979-90), numerical analysis of convective flows (1982-86), geographic information systems (1977-81), prediction and control of atmospheric pollution (1975-77), theory of nonlinear waves and resonance (1971-74).

Member of the editorial committee of the *J. of Turbulence*, of *Multiscale Modeling and Simulation*, SIAM (2001-2005), of the *European J. Mechanics B: Fluid Mechanics* (1992-2003) and of *Nonlinearity* (1992-1995). Member of the evaluation committee of the Centre for Turb. Res., Stanford University and referee of numerous scientific journals, such as *J. Fluid Mechanics*, *Phys. Fluids*, *Europhys. Lett.*, *Fluid Dynam. Res.*, *Phys. Rev. Letters*, *J. Comput. Physics.*, as well as for the National Science Foundation (USA), for the Spanish CICYT, for the regional research Council of the state of Aragón, for NATO, for the European Research Council and for the PRACE European supercomputing initiative. Associate editor for *Physics of Fluids* (1998-2002) and contributor to the *Mathematical Reviews* of the American Mathematical Society (1978-1990).

He has been principal investigator of numerous research contracts, both institutional and industrial, including two consecutive Advanced Grants of the European Research Council (2011-2021). He has participated in the organization of research conferences, as director or codirector in 11 of them.

He has coauthored over a hundred publications in international refereed journals, 9 books, 85 book chapter and invited conferences, 13 invited courses, 21 technical reports and numerous other publications, resulting in over 5000 citations. He has directed 15 doctoral theses.

He is member of the Spanish Royal Academy of Engineering. Elected fellow of the American Physical Society, of the Institute of Physics of London and of the European Mechanics Society (Euromech). He is member of the American Mathematical Society, and serves at the Management Board of ERCOFTAC (Europ. Res. Comm. on Flow Turb. and Combustion). He has been national coordinator of the Fluid Dynamics Panel and director of the WG-21 (Data base of experimental data in turbulence) of AGARD/NATO (1987-98), and Spanish delegate at the International Federation for Information Processing (1984-86). He has been member of the European Turbulence Conference Committee (EUROMECH) (1990-1994, 2003-2007), of the congress committee of IUTAM (1995-2002), of the Association for Computing Machinery (1984-2005), of its SIGGRAPH (Computer Graphics), and of the Spanish Association of Informatics and Automatics (1984-1998).

He received the research price of the Spanish Royal Academy of Sciences in 1998.