

Professor Miguel A. F. Sanjuan

Foreign Member of the Lithuanian Academy of Sciences since 2008

Miguel Angel Fernández Sanjuán (Miguel A. F. Sanjuán) is a Spanish Theoretical Physicist from Leon, Spain. He is known for his contributions in nonlinear dynamics, chaos theory, and control of chaos. He was born 30 of October, 1959 in Leon, Spain.

#### **Education**

Degree in physics, Speciality of General Physics, university of Valladolid, 1976–1981

Master's degree in Physics, Master thesis: Anisotropic contractions of the Poincare group, Universidad de Valladolid, 28 of November of 1981

PhD Degree in Physics: Contribution to the analytical study of some properties of nonlinear oscillators, Universidad National de Education a Distancia, Madrid, 24 of September 1990.

# **Present and Previous Positions**

2017–2018 Fulbright Visiting Research Scholar, Institute for Physical Science and Technology, University of Maryland, USA

2010–2011 Visiting Research Professor, Beijing Jiaotong University, Beijing, China

2002-Full Professor of Physics, Universidad Rey Juan Carlos, Madrid, Spain

2016-Professor, Department of Applied Informatics, Kaunas University of Technology, Kaunas, Lithuania

1997-2002 Associate Professor of Physics, Universidad Rey Juan Carlos, Madrid, Spain

1986–1997 Associate, Assistant and Lecturer of Physics, Universidad Politécnica de Madrid, Madrid, Spain

1995–1996 Visiting Research Associate, Institute for Physical Science and Technology, University of Maryland, USA

1984-Wissenschaftliche Mitarbeiter, Institut für Dynamischen Systemen, Universität Bremen, Germany

1984–1986 Predoctoral Researcher, Universidad Nacional de Educación a Distancia, Madrid, Spain 1982–1984 Teaching Assistant, Universidad de Valladolid

## Fields of Scholarship

Nonlinear dynamics and chaos in dynamical systems

Control of chaos

Chaotic dynamics of nonlinear oscillators

Modelling and physics of cancer

Nonlinear resonances: vibrational resonance and stochastic resonance

Dynamical systems with delay

Map-based neuron models

Fractal structures in nonlinear dynamics: fractal basins, Wada basins, basin entropy

Chaotic scattering in Hamiltonian Systems

Dynamical modelling in biology: ecology, neurodynamics

#### **Honours and Awards**

2017 Fulbright Visiting Scholar, University of Maryland at College Park, USA

2016 Guest Honorary Professor, Zigong University of Science and Technology, Zigong, China

2016 Research Excellence Award in category of Sciences, Universidad Rey Juan Carlos, Madrid, Spain

2015 Corresponding Member of the Spanish Royal Academy of Sciences, section Physics and Chemistry, Madrid, Spain

2012–2015 Guest Professor in the Institute of Computational Physics and Complex Systems of Lanzhou University, China

2011 Diploma for the continuity in the activities of the Blog Complexity, Government of Madrid.

2008 Foreign Member of the Lithuanian Academy of Sciences (Physics and Mechanical Engineering), Vilnius, Lithuania

1982 Outstanding Graduation Honor, Universidad de Valladolid, Valladolid, Spain

### **Full list of publications**

https://www.ae-info.org/ae/Member/Sanjuan Miguel Angel/Publications