

David RUELLE

Curriculum vitae

I was born on August 20, 1935 in Ghent (Belgium). My elementary and high-school studies took place in Mons (Belgium) where I also studied Civil Engineering for two years. In 1955 I obtained the diploma of "Candidat Ingénieur Civil" at the "Faculté Polytechnique" of Mons. The same year I passed complementary examinations for the diplomas of "Candidat en Sciences Mathématiques" and "Candidat en Sciences Physiques" at the Free University of Brussels. I then studied in Brussels, where I graduated in Physics in 1957 and obtained in 1959 a PhD in Physics. This PhD had been prepared in Zurich with Res Jost. After one year of military service in the Belgian infantry (1959-1960) I spent two years at the Eidgenössische Technische Hochschule in Zurich as Research Assistant and then also Privatdozent. I spent the next two years (1962-1964) as Member at the Institute for Advanced Study in Princeton, NJ, and have returned there to spend the academic year 1970-1971. I am Professor at the Institut des Hautes Etudes Scientifiques of Bures-sur-Yvette, France, since 1964, honorary since 2000.

I am married since 1960 with Janine, born Lardinois, and we have three children : Nicolas (born 1961), Anne (born 1963), and Denise (born 1968). On 17 July 1984 I have acquired the French citizenship.

Books and monographs:

- Statistical Mechanics, Rigorous Results (Benjamin, New York, 1969).
- Thermodynamic Formalism (Addison-Wesley, Reading MA, 1978).
- Elements of Differentiable Dynamics and Bifurcation Theory (Academic Press, Boston, 1989).
- Chaotic Evolution and Strange Attractors (Lecture notes by S. Isola. Cambridge University Press, Cambridge, 1989).
- Chance and Chaos (Princeton University Press, Princeton NJ, 1991).
- Dynamical zeta functions for piecewise monotone maps of the interval (CRM, American Mathematical Society, Providence RI, 1994).
- Turbulence, Strange Attractors, and Chaos (Reprinted papers. World Scientific, Singapore, 1995).
- The Mathematician's Brain (Princeton University Press, Princeton NJ, 2007).

Academies :

- Académie des Sciences de Paris (Member, 1985).
- American Academy of Arts and Sciences (Foreign Honorary Member, 1992).
- Academia Europaea (Member, 1993).
- National Academy of Sciences (Foreign Associate, 2002).
- Accademia Nazionale dei Lincei (Foreign member, 2003).

Honorary degrees :

- Ecole Polytechnique Fédérale, Lausanne, Switzerland (1977).
- Université de Mons-Hainaut, Belgium (1994).

Decorations :

- Légion d'Honneur (France): Chevalier (1989).
- Ordem Nacional do Mérito Científico (Brazil): Grã-Cruz (2002).
- Order of Leopold (Belgium): Commander (2022).

Awards :

"Boris Pregel Award for Research in Chemical Physics", New York Academy of Sciences (1974). "Prix Albert Ier de Monaco", Académie des Sciences de Paris (1979). "Dannie Heineman prize for Mathematical Physics", American Physical Society and American Institute of Physics (1985). "Boltzmann medal", IUPAP (1986). "Holweck medal", Société Française de Physique and Institute of Physics (1993). "Ludwig Boltzmann-Forschungspreis", Land Steiermark and Universität Graz (1995). "Matteucci medal", Accademia Nazionale delle Scienze (2004). "Henri Poincaré prize", International Association of Mathematical Physics (2006). "Premio Peano", Associazione Subalpina Mathesis (2009). "Max Planck medal", Deutsche Physikalische Gesellschaft (2014). Dirac medal and prize (2022)

Special lectures (selection) :

Lezioni Lincee 1987 (Rome). Josiah Willard Gibbs lecture 1988 (AMS, Atlanta). Claude Bernard lecture 1989 (Royal Society, London). Aisenstadt lectures 1993 (Montreal). Lezioni Fermiane 1995 (Lincei, Pisa). Lezioni Leonardesche 1995 (Milano). Pauli lectures 1996 (Zurich). Johann Bernoulli lecture 1999 (Groningen). Jürgen Moser Prize lecture 2003 (SIAM, Snowbird UT). Moshe Flato lecture 2007 (Beer-Sheva). Lezioni Enriques 2009 (Milano). Schrödinger lecture 2010 (Zurich). Peano lecture 2010 (Torino). David M. Lee Historical Lecture in Physics 2022 (Harvard).

Over the years I have been a visiting professor in a number of universities in the United States (UC Berkeley, UC Irvine, Duke, Caltech, UA Tucson), and elsewhere (ETH Zürich, Roma, U de Montréal, etc.). I have also visited the IMPA (Rio de Janeiro) a number of times. I have been for many years a regular visitor at Rutgers.