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Studies and Research Positions

1973-1975

Département de Physique des Plasmas et de la Fusion Contrôlée,
CEA (Commissariat à l'Energie Atomique), Fontenay-aux-Roses,
Long-term research contract.

1975-1977

Master of Science, Stanford University (USA),
Grant from the French Ministry of Foreign Affairs.

1977-1980

Thèse de 3ième cycle (PhD) in Physics, Université Paris VII (France),
Grant from the DGRST (Délégation à la Recherche Scientifique).

1980-1981

Postdoc, Harvard University,
Fulbright grant.

1981-1992

Chargée de Recherche,
CNRS (Centre National à la Recherche Scientifique).

1987

Thèse d'Etat (Habilitation) in Mathematics, Université Paris VI (France).

1994-1995

Sofia-Kovaleskaia Chair, Universität Kaiserslautern (Germany),
Professor of Mathematics.

1992-today

Directrice de Recherche CNRS,
CNRS (Centre National à la Recherche Scientifique).

Visiting Positions

- DAMTP (Applied Mathematics and Theoretical Physics Department),
Cambridge University (UK), *April 1988.*
- CTR (Center for Turbulence Research),
Stanford University and NASA-Ames (USA), *July 1990.*
- CSTP (Center of Studies in Theoretical Physics),
Clark University, Atlanta (USA), *July 1993.*
- CNLS (Center for Non Linear Studies),
Los Alamos (USA), *August 1993.*
- IAS (Institute for Advanced Studies),
Princeton (USA), *April 1994.*
- Newton Institute for Mathematical Sciences,
Cambridge (UK), *August 1996.*
- Mathematics Department, QUT (Queensland University of Technology),
Brisbane (Australia), *January-August 1997.*
- Applied Mathematics Department,
Bonn University (Germany), *November 1997.*
- CNLS (Center for Non Linear Studies),
Los Alamos (USA), *May 1998.*
- Mathematics and Statistics Department,
McMaster University, Hamilton (Canada), *December 1998.*
- Mathematics Department, QUT (Queensland University of Technology),
Brisbane (Australia), *August 1999.*
- Mathematics Department and TICAM (Texas Institute for Computational
and Applied Mathematics), Texas University at Austin (USA),
February 2000.

- CTR (Center for Turbulence Research),
Stanford University and NASA-Ames (USA), *August 2000.*
- CEMRACS (Centre d'Eté Mathématique de Recherche Avancée en Calcul Scientifique), CIRM (Centre International de Rencontres Mathématiques),
Marseille (France), *August 2001.*
- Mathematics Department and Center for Environmental Sciences, Arizona
State University, Tempe (USA), *December 2001.*
- CEMRACS (Centre d'Eté Mathématique de Recherche Avancée en Calcul
Scientifique), CIRM (Centre International de Rencontres Mathématiques),
Marseille (France), *August 2002.*
- BIRS, PIMS (Pacific Institute for Mathematical Sciences), Banff (Canada),
June 2003.
- IMS (Institute of Mathematical Sciences), Singapore, *August 2004.*
- Universidade Federale do Rio Grande do Sul, Porto Alegre (Bresil),
September 2004.
- Computer Sciences Department, Nagoya University (Japan), *October 2004.*
- Trinity College, Cambridge (UK), *January-March 2005.*

Academic Prizes and Honors

1971

Award, *ESRO (European Space Research Organization).*

1985

Award, *Ministry of Foreign Affairs of Japan.*

1988

Award, *Concours Seymour Cray on Scientific Computing .*

1989

Grand Prix du CNRS, *Concours La Recherche en Action*, organized by
CNRS for its 50th Anniversary.

1990

Award, *Eigth Annual Fluid Mechanics Contest*, American Physical Society,
Division of Fluid Dynamics.

1993

Prix Poncelet, French Academy of Science.

2005

Elected, *Academia Europaea, Physics and Engineering.*

Publications

54 articles in refereed journals,
33 articles in books,
51 articles in conference proceedings,
66 other articles.

Member of Editorial Boards

1993

Wavelets, Fractals and Fourier Transform, Clarendon Press.

1993-

Journal of Applied and Computational Harmonic Analysis, Academic Press.

1994-

The Journal of Fourier Analysis and Applications, Birkhäuser.

2004-

SIAM Journal of Multiscale Modeling and Simulation, SIAM.

2005

Journal of Turbulence, special issue in honor of Joel Ferziger,
Taylor & Francis.

Teaching

Courses on:

- *Fourier, Wavelets and Wavelet Packet Transforms*,
- *Computer Graphics and Image Processing*,
- *Physical Modelling of Turbulence*,

at Université Technologique de Compiègne in Sévenans (France), Wuhan University (China), CNES (Centre National d'études Spatiales) in Toulouse (France), Middle East Technical University in Ankara (Turkey), ENS (Ecole Normale Supérieure) in Paris (France), Max Planck Institute für Plasma Physik in Garching (Germany), Technischen Universität in München (Germany), Kaiserslautern Universität (Germany), Campinas University (Brazil), ENSTA (Ecole Nationale Supérieure des Sciences et Techniques Avancées) in Paris (France), ONERA (Office National d'Etudes et de Recherches Spatiales) in Chatillon (France), Formation Permanente du CNRS in Gif-sur-Yvette (France), Technische Universität in Hamburg (Germany), University of California in Santa Barbara (USA), EGIM (Ecole Généraliste des Ingénieurs) in Marseille (France), Universidade Federale do Rio Grande do Sul in Porto Alegre (Brazil).