CURRICULUM VITAE (*)

Hugo Beirão da Veiga

PERSONAL DATA:

Born: April 3, 1943 at Lisbon, Portugal Name: Hugo Surname: Beirão da Veiga Citizenship: Italian and Portuguese E-mail: hbeiraodaveiga@gmail.com Address: Department of Mathematics-Pisa University.

EDUCATION:

1965- Master of Math. Sc.: Lisbon University, 1965.

1971-Ph.D.: Docteur ès Sciences Mathématiques, with very honorable mention (mention très honorable), Pierre et Marie Curie University (Paris VI-Sorbonne). Thesis Directors Dref. Ceride Stevenseekie Dresident Lucy Dref.

Thesis Director: **Prof. Guido Stampacchia**. President Jury: **Prof.** Jacques-Louis Lions.

AREA of SPECIALIZATION:

Partial Differential Equations, Functional Analysis, Mathematical Fluid Mechanics.

EMPLOYMENT:

- Fellow of the IAC ("Instituto de Alta Cultura"), Portugal, at the Pisa University 1965–68, and at the Rome and Paris Universities 1968–71.
- CNR Visiting Professor at the Scuola Normale Superiore di Pisa, 1972–73.
- Researcher (with grade equivalent to Associated Professor) at the IAC's Center
 "Instituto de Fisica e Matemática", Lisbon, 1971–76, with an interruption in 1972-74, due to military service in the Navy.
- Full Professor of Mathematics at the Trento University, Italy, 1976–87.
- Full Professor of Mathematics at the Pisa University, 1987–90.
- Full Professor at the "ACCADEMIA NAZIONALE dei LINCEI", Rome, 1990–93.

(*) Events and talks held merely on-line are not included below.

- Full Professor of Mathematics at the Pisa University, 1993–2011.

LONG PERIOD FULL PROFESSOR POSITIONS (ACCEPTED INVITA-TIONS):

- Full Professor at the Mathematics Department, and at the "Mathematics Research Center", University of Wisconsin-Madison, (October 1981–March 1982).
- Full Professor at the University of Minnesota Minneapolis, March 1982
 June 1982).
- Full Professor at the Mathematics Department, University of Wisconsin Madison (1985–86).
- Full Professor at the Faculty of Science, University of Lisbon (March–June 1998).
- Full Professor at the Faculty of Science, University of Lisbon, under a C.
 Gulbenkian Professorship (February–July 2006).

MISCELLANEOUS:

- Prize "Artur Malheiros" for the Mathematical Sciences, Lisbon Academy of Science, 1973.
- Nominated by the President of the Portuguese Republic in 2000 with the rank of Grand-officer of the twelfth century "Ordem Militar de Sant'Iago da Espada", nowadays the highest honorific order to scientific, literary and artistic merit.
- Director of the Department of Applied Mathematics Pisa University, 1996–2000.
- First President of the Scientific Council of the International Center of Mathematics-CIM (Coimbra), 1996–2000.
- Member of the Scientific Council of the CIME-International Mathematical Summer Center-Florence, 2011-2019.
- Fellow of the Portuguese Academy of Science (Academia das Ciências de Lisboa).

DEDICATED INTERNATIONAL CONFERENCES:

 "Nonlinear Partial Differential Equations. Theory and Applications", International Conference in honour of Hugo Beirão da Veiga's on his 60th Birthday, June 26-28, 2003, Madeira Island, Portugal.

Organizing Committee: G.P. Galdi, A. Sequeira, A.L. Silvestre, R. Vasconcelos.

Speakers: O. A. Ladyzhenskaya, L. Nirenberg, J. Bemelmans, L.C. Berselli, H. Brézis, J.P. Dias, I. Fonseca, H. Frid, J. Heywood, Ling Hsiao, D. Kinderlehrer, P. Marcati, S. Miyatake, S. Nazarov, T. Nishida, P. Oliveira, G. Da Prato, A. Quarteroni, R. Rannacher, A. Robertson, J.F. Rodrigues, R. Russo, P. Secchi, G. Seregin, C. Simader, V. A. Solonnikov, L. Tartar, R. Turner, A. Valli.

 "Recent Advances in Partial Differential Equations and Applications", International Conference in honor of Hugo Beirão da Veiga's 70th Birthday, February 17-21, 2014. Levico Terme (Trento), Italy.

Scientific Committee: Claude Bardos, Vladimir Georgiev, Vicentiu Radulescu, Adélia Sequeira, Vsevolod A. Solonnikov.

Speakers: C. Amrouche, P. Antonelli, C. Bardos, V. Benci, L.C. Berselli, D. Breit, G. Buttazzo, D. Chae, F. Crispo, R. Farwig, E. Feireisl, F. Flandoli, G.P. Galdi, V. Georgiev, Z. Grujic, P. Kaplicky, M. da Costa Lopes Filho, P. Maremonti, A. Matsumura, S. Necasova, H. J. Nussenzveig Lopes, A. Quarteroni, V. Radulescu, R. Rautmann, J.F. Rodrigues, T. Ruggeri, M. Ruzicka, W. Sadowski, G. Seregin, Y. Shibata, T. Shilkin, A.L. Silvestre, C. Simader, V. A. Solonnikov, W. Varnhorn, A.F. Vasseur, Zhouping Xin, T. Yanagisawa.

Conference Proceedings: Contemporary Mathematics, Vol. 666, American Mathematical Society, 2016. Editors, V.D. Radulescu, A. Sequeira, V.A. Solonnikov.

MEMBERSHIP OF SCIENTIFIC COMMITTEES AND ORGANIZA-TION OF INTERNATIONAL MEETINGS:

- CIRM-International Center for the Math. Research: "Nonlinear Partial Differential Equations", Trento, June 1980.
- CIME-Centro Internazionale Matematico Estivo: "Fluidynamics", Varenna, August 1982.
- Scuola Normale Superiore and Math. Department Univ. Pisa: "Fluidynamics", Pisa, May 1987.
- International Center for Theoretical Physics and International Atomic Energy Agency: "Workshop on Theoretical fluid Mechanics and Applications", Miramare-Trieste, January 1989.
- Scuola Superiore S. Anna: "Modelli Matematici nelle Scienze Applicate", Pisa, May 1990.

- Math. Dept. -Pisa University, under the auspices of the Consiglio Nazionale delle Ricerche: "Nonlinear Variational Problems and Partial Differential Equations", Isola d'Elba (It), October 1990.
- CIRM-International Center for the Math. Research: "Partial Differential Equations and related subjects", Conference in the honour of Louis Nirenberg, Trento, September 1990.
- **CIRM-International Center for the Math. Research**: "Partial Differential Equations and Continuum Mechanics", Trento, June 1991.
- ICTP-International Centre for Theoretical Physics: Workshop on Qualitative Aspects and Applications of Nonlinear Evolution Equations", Miramare, Trieste, May 1993.
- **EQUADIFF 95**, **Lisbon**, July 1995.
- "International Conference on Applied Analysis", dedicated to Prof. J. Nečas, Lisbon, February 1997.
- Summer School "The Mathematical Approach to Turbulence: Numerical and Analytical Techniques", Certosa di Pontignano (Siena), June 1998.
- Trimester on Theoretical and Computational Fluid Dynamics (May–July 1999),
 Coimbra and Lisbon.
- Summer School "Navier–Stokes Equation and Related Topics", Lisbon, June–July 1999.
- "**IPERBS 2000**", **Brescia**, November 2000.
- "Contemporary Challenges in Applied Fluid Mechanics", Capo Miseno (Naples), May-June 2001.
- "Regularity in Partial Differential Equations", Lisbon, November 2001.
- V.A.Steklov Institute of Mathematics (Russian Acad. of Sciences) and Euler International Mathematical Institute: "Navier-Stokes Equations and Applications" NSEC 8, St.Petersburg, September 2002.
- "Journées a la mémoire de Guido Stampacchia", Paris, March 2003.
- "Partial Differential Equations in Mathematical Physics", in memory of O.A.Ladyzhenskaya, Levico Trento, Italy, October 2004.
- "Partial Differential Equations and Applications", Ferrara, Italy, March-April 2005.
- International Conference "Mathematical Fluid Mechanics and Applications", Evora, Portugal, June 2008.
- Centro di Ricerca Matematica "E. De Giorgi", Sc. Normale Sup. Pisa:
 "Navier-Stokes Equations: Classical and Generalized Models", Pisa, September 2008.

- **CIRM-International Center for the Math. Research**: "Mathematical Physics and PDE's", Levico Terme (Trento), September 2009.
- CIRM-International Center for the Math. Research: "International Summer School on Mathematical Fluid Dynamics", Levico Terme (Trento), June 27-July 2, 2010.
- International C.I.M.E. Summer School "Topics in Mathematical Fluid-Mechanics", Cetraro (Cosenza), September 2010.
- "International Conference on Mathematical Fluid Mechanics and Biomedical Applications", Azores, Portugal, May 31- June 4, 2011.
- CIRM-International Center for the Math. Research: "PDEs in Mathematical Physics and their Numerical Approximation", Levico Terme (Trento), September 2011.
- CIRM-International Center for the Math. Research: "International Winter School on Mathematical Fluid Dynamics", Levico Terme, December 2012.
- WASCOM XVII: "International Conference on Waves and Stability in Continuous Media", Levico Terme (Trento), Giugno 2013.
- CIRM-International Center for the Math. Research: "Fluid Dynamics and Electromagnetism: Theory and Numerical Approximation", on the occasion of P.
 Secchi and A. Valli 60th birthday, Levico Terme (Trento), June 3-6, 2014.
- Riemann International School of Mathematics: "A Meeting with Louis Nirenberg", Varese, (Villa Toeplitz), June 10-13, 2014.
- "Workshop on PDE's and Biomedical Applications", Lisbon, December 4-6, 2014.
- Lisbon Academy of Science: "Workshop on PDE's and Biomedical Applications", Lisbon, November 13-15, 2017.
- CIRM-International Center for the Math. Research: "Recent Advances in Nonlinear Analysis", On the occasion of 60th birthday of V. Radulescu, Levico Terme (Trento-Italy), May 28-30, 2018.
- FUDAN University, Shanghai, China: "LIASFMA China-Italy Conference on Partial Differential Equations and Their Applications", December 9th-13th, 2019.

MAIN SPEAKER (PLENARY TALKS) IN INTERNATIONAL MEET-INGS.

— III Jornadas Matemáticas Hispano–Lusitanas, Seville, April 1974.

- Ettore Majorana Scientific Center: "Recenti Sviluppi ed Applicazioni della Teoria delle Disequazioni Variazionali", (Erice-Sicily) May 1975.
- "Nato Advances Study Institute on Nonlinear Operators", Bruxelles, September 1975.
- International Centre for Theoretical Physics- Miramare, Trieste: Workshop on "Recent Advances on the Theory of Evolution Equations", November 1979.
- MFO- Oberwolfach Research Institute for Mathematics: "Nonlinear Functional Analysis and Partial Differential Equations", December 1979.
- Annual meeting GNAFA-"National Group for Functional Analysis and Applications", Rimini, September 1980.
- , Politecnico di Torino: "Modelli in Meccanica dei Fluidi: Aspetti di Analisi Funzionale e Numerica" January 1981.
- Bologna University: Cycle of seminars at the "Specialization School on Physics", Physics Inst., April 1984.
- SISSA-Scuola Internazionale Superiore di Studi Avanzati: Cycle of lectures, Miramare (Trieste), May 1984.
- SISSA-International Center for Theoretical Physics, Trieste: "Autumn Course on Semigroups: Theory and Applications", December 1984.
- SISSA-Scuola Internazionale Superiore di Studi Avanzati, Miramare, (Trieste): Cycle of lectures, March 1985.
- IMA- Institute for Mathematics and its Applications Univ. of Minnesota, Minneapolis: "Dynamical Problems in Continuum Physics", June 1985.
- CIRM-International Center for the Math. Research: "Calculus of Variations and Partial Differential Equations", meeting in honour of Prof. Hans Lewy), Trento, May 1986.
- Scuola Normale Superiore di Pisa: "Fluidynamics" workshop, May 1987.
- International Center for the Math. Research-CIRM: "Advanced Topics in the Theory of Dynamical Systems", Trento, June 1987.
- Institute for Scientific Interchange-Turin: "Nonlinear Hyperbolic Equations in Applied Sciences", June 1987.
- Italian Science Research Council-CNR, San Luca's Academy- Rome: "International Conference in memory of Guido Stampacchia, Rome 1988.
- MFO- Oberwolfach Research Institute for Mathematics: "The Navier-Stokes Equations: Theory and Numerical Methods", September 1990.
- Math. Department- Padova University: "Conference on Nonlinear Partial Differential Equations", April 1990.

- Math. Institute- Charles University in Prague: "Mathematical Modelling in Continuum Mechanics", Prague, August 1990.
- workshop "PDE and Continuum Mechanics", **Trento**, June 1991.
- MFO- Oberwolfach Research Institute for Mathematics: "The Navier– Stokes Equations: Theory and Numerical Methods", August 1991.
- Accademia Sinica (Chinese Academy of Sciences): "Meeting on Partial Differential Equations", Peking (Beijing) September 1991.
- "Fourth International Conference on Hyperbolic Problems", Taormina (Italy) April 3–8 1992.
- Istituto per le Applicazioni del Calcolo–Consiglio Nazionale delle Ricerche:
 "International Conference on Nonlinear Evolution Problems", Rome, June 1992.
- RIMS-Research Institute for Mathematical Sciences: Symposium on "Mathematical Analysis of Phenomena in Fluid and Plasma Dynamics", Kyoto University, October 22–24, 1992.
- Math. Departement- Nara University: "Mathematical Analysis and Fluidmechanics", Nara (Japan), October 26–28, 1992.
- Ecole Normale Supérieure, Paris: "Equations aux Dérivées Partielles et Applications", Paris, March 29–April 1, 1993.
- CMAF- Lisbon University and Calouste Gulbenkian Foundation: Cycle of lectures, Lisbon, June–July 1993.
- Institute of Mathematics, Rhein–Westfalien University: Cycle of lectures at the graduate School "Hyperbolische Differentialgleichungen–Theory and Numerik", Eringerfeld, October 1993.
- "Colloquium "Fortschritte in der Kontinuums-Mechanik" (meeting in honour of Prof. V.A. Solonnikov), Paderborn, Germany, October 1993.
- "Third International Conference on Navier–Stokes Equations and related Nonlinear Problems", Madeira Island, May 1994.
- "Fifth Int. Colloquium on Diff. Equations", **Plovdiv (Bulgaria)** August 1994.
- Politecnico di Milano: "Giornate di Studio su Problemi Iperbolici", Milano, Ottobre 1994.
- Fudan University, Shangai: "International Conference on Nonlinear Evolution Equations and Infinite Dimensional Dynamic Systems", Shanghai (China), June 12–17, 1995.
- EQUADIFF 95, Lisbon, July 24–29, 1995.
- "International Colloquium", Ferrara, October 23–24, 1995.
- "Evolutionary Problems for Dynamical Systems", **Trento**, October 4–6, 1995.
- "Sixth Int. Conf. on Navier–Stokes Equations and

- "V Incontro Nazionale sulle Eq. Iperboliche–IPERAQ 97", L'Aquila, November 1997.
- "Recent Advances in Partial Diff. Eq.", on the 20th anniversary of Guido Stampacchia's death, Rome, May 1998.
- Math. Institute– Charles University in Prague: "PDE Prague 98"– International Conference on Partial Differential Equations Theory and Numerical Solutions, Prague, August 1998.
- IST–Instituto Superior Tecnico: "Conference on Dynamical Systems and Evolutionary Equations", in honor of Jack K. Hale, Lisbon, November 23–28, 1998.
- Capo Miseno, Naples: International Conference "Topics in Mathematical Fluid Mechanics", May, 2000.
- Capo Miseno, Naples: International Conference "Contemporary Challenges in Applied Fluid Mechanics", Project of the European Science Foundation, May-June 2001.
- Rolduc, Holland: "Fourth European Conference on Elliptic and Parabolic Problems", June 2001.
- CMAF-Lisbon University: "Regularity in Partial Differential Equations", Lisbon, November 2001.
- Coimbra University: "Encontro Nacional da Sociedade Portuguesa de Matematica 2002", Coimbra (PT), February 2002.
- Politecnico di Milano: "Cardiovascular System: from Mathematical Modelling to Clinical Applications", Milan, March 2002.
- Instituto de Matematica Pura e Aplicada–IMPA: "International Conference-IMPA 50 Years", Rio de Janeiro, Brasil, June 2002.
- V.A. Steklov Institute of Mathematics, Russian Acad. of Sciences and Euler International Mathematical Institute, St.Petersburg: "Navier-Stokes Equations and Applications" (NSEC 8), in honor of O.A. Ladyzhenskaya, St. Petersburg (Russia), September 2002.
- RIMS-Research Institute for Mathematical Sciences: RIMS Symposium on "Wave Phenomena and Asymptotic Analysis", Kyoto University, Japan, November 2002.
- Laboratoire Jacques-Louis Lions, Paris: "Journées a la mémoire de Guido Stampacchia", Paris, March 2003.
- Ettore Majorana Scientific Center: 38th Workshop "Variational Analysis and Applications", in memory of G. Stampacchia and J.-L. Lions, Erice-Sicily, June 2003.

- Paderborn University, Germany: "Workshop on Navier-Stokes Equations", on the 70th. birthday of V.A. Solonnikov, Paderborn, July 2003.
- Ferrara University: International Meeting "Directions in Partial Differential Equations", in occasion of 70th of V.A. Solonnikov, Ferrara (Italy), November 2003.
- Paderborn University, Germany: Workshop "Navier-Stokes Equations and Related Topics", in occasion of 65th of H. Sohr, Paderborn, February 2004.
- "Fifth European Conference on Elliptic and Parabolic problems: A Special tribute to the Work of Haim Brezis", Gaeta, Italy, May-June 2004.
- "Conference in honour of **João Paulo Dias** on his 60.th birthday", **Lisbon**, September 2004.
- International Conference "Partial Differential Equations in Mathematical Physics", Levico Trento, Italy, October 2004.
- "Abschluss Kolloquium Graduiertenkolleg "Nichtlineare Differentialgleichungen: Modellierung, Theory, Numerik, Visualisierung", Freiburg, Germany, November 2004.
- "Kyoto Conference on the Navier-Stokes Equations and their Applications", Research Institute for Mathematical Sciences-Kyoto University, Kyoto, January 6–10, 2006.
- Mathematics Dept.–Evora University: "III International Conference on Mathematical Fluid Mechanics and Applications", Evora, Portugal, June 15–17, 2006.
- International Conference "Mathematical Fluid Mechanics", Estoril, Portugal, May 21–25, 2007.
- The Euler International Mathematical Institute and St.Petersburg Department of the Steklov Mathematical Institute, of the Russian Academy of Sciences: International Conference "Mathematical Hydrodynamics: Euler Equations and Related Topics, EEC-300", dedicated to 300th birthday of Leonard Euler. St.-Petersburg, RUSSIA, June 7–9, 2007.
- **Evora University**: International Conference "Mathematical Fluid Mechanics and Applications", Evora, Portugal, June 2008.
- Technische Universitat Darmstadt: International Conference "Mathematical Fluid Dynamics", Darmstadt, Germany, September 2008.
- Centro di Ricerca Matematica "E. De Giorgi" Scuola Normale Sup. Pisa: "Navier-Stokes Equations: Classical and Generalized Models", Pisa, September 2008.
- RWT–Rheinisch-Westfaelische Technische Hochschule–Aachen: "Workshop on Navier-Stokes Equations 2009", Aachen, Germany, June 2009.
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- MFO–Oberwolfach Research Institute for Mathematics: "Mathematical Aspects of Hydrodynamics", Oberwolfach, Germany, July 2009.
- 8th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Special session "Navier-Stokes Equations and Related Problems", Dresden, Germany, May 2010.
- CIRM-Centre International de Rencontres Mathematiques-Luminy: "Vorticity, Rotation and Symmetry (II)- Regularity of Fluid Motion", Luminy (Marseille), May 23-27, 2011.
- Azores Island–Portugal: "International Conference on Mathematical Fluid Mechanics and Biomedical Applications", May 31- June 4, 2011.
- RWT–Rheinisch-Westfaelische Technische Hochschule–Aachen "Workshop on Navier Stokes Equations 2011", Aachen, Germany, June 14-17, 2011.
- CIRM–International Center for the Math. Research: "PDEs in Mathematical Physics and their Numerical Approximation". Levico Terme (Trento), September 2011.
- Institut Mittag-Leffler, from the Royal Swedish Academy of Sciences: "Advances in Mathematical Analysis of Partial Differential Equations", On the 90th anniversary of Olga A. Ladyzhenskaya, Stockholm, Sweden, 9-13 July 2012.
- Polish Academy of Sciences–Mathematical Research Center–Bedlewo:
 "Parabolic and Navier Stokes Equations", Bedlewo (Poland), September 2-8, 2012.
- "International Winter School on Mathematical Fluid Dynamics", Levico Terme (Trento), December 2012.
- Nara University: "International Conference on the Mathematical Fluid Dynamics", on the occasion of Prof. Y. Shibata 60th birthday, Nara (Japan), March 5-9, 2013.
- Warwick University, in Venice: International Conference "The Navier-Stokes Equations in Venice", Venice, April 8-12, 2013.
- RWT-Aachen University: "Workshop on Navier Stokes Equations 2013", Aachen, Germany, May 21-24, 2013.
- WASCOM XVII "International Conference on Waves and Stability in Continuous Media", Levico Terme (Trento), Giugno 2013.
- CIRM–International Center for the Math. Research: "Fluid Dynamics and Electromagnetism: Theory and Numerical Approximation", on the occasion of Professors P. Secchi and A. Valli 60th birthday, Levico Terme (Trento), June 3-6, 2014.
- Lisbon University: "Progress in Nonlinear Partial Differential Equations", on the occasion of Professors N.N. Uraltseva and V.A. Solonnikov 80th birthday,
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Lisbon, May 29-31, 2014.

- Ferrara University: "Classical Problems and New Trends in Mathematical Fluid Dynamics", on the occasion of K. Pileckas, 60th birthday, Ferrara (Italy), September 29 -October 3, 2014.
- Lisbon University: International Conference "AMFM-2014, Advanced in Mathematical Fluid Mechanics-Stochastic and Deterministic Methods", Lisbon, June 30-July 5, 2014.
- CICAM-7–"Seventh China-Italy Colloquium on Applied Mathematics", Palermo-Italy, September 8-11, 2014.
- Faculty of Mathematics, Informatics and Mechanics- University of Warsaw: "Global dynamics in evolutionary PDEs", on the occasion of G. Lukaszewicz's 60th birthday. Warsaw, Poland, April 17-18, 2015.
- "International Conference on Differential and Difference Equations and Applications", Amadora, Portugal, May 18 - 22, 2015.
- 18th WASCOM Conference "XVIII International Conference on Waves and Stability in Continuous Media", Cetraro (Cosenza, Italy), June 1-5 2015.
- Freiburg University, Germany: "Colloquium to celebrate the 50. anniversary of the defense of Herbert Amann's PhD thesis", Freiburg, Germany, July 2, 2015.
- Polish Academy of Sciences–Mathematical Research Center–Bedlewo: "Mathematical Fluid Mechanics. Old Problems, New Trends", on the occasion of W. Zajaczkowski's 70th birthday, Bedlewo, Poland, August 30- September 5,2015.
- Universidade Nova de Lisboa: "International Workshop on Calculus of Variations and its Applications", on the occasion of Luisa Mascarenhas' 65th birthday, Caparica, Portugal, December 17-19, 2015.
- CIRM–International Center for the Math. Research: "Recent Advances in Nonlinear Analysis", On the occasion of 60th birthday of V. Radulescu, Levico Terme, Trento-Italy, May 28-30, 2018.
- St.Petersburg Department of the Steklov Mathematical Institute, of the Russian Academy of Sciences: "PDE"s and Mathematical Hydrodynamics:", in honor of Vsevolod A. Solonnikov's 85'th birthday, St. Petersbutg, Russia, July 30 - August 3,, 2018.
- Fudan University–Shanghai: "LIASFMA China-Italy Conference on Partial Differential Equations and Their Applications", Shanghai, China, December 9th-13th, 2019.

LIST OF SEMINARS HELD IN THE CONTEXT OF SHORT-TERM INVITED VISITS, NOT INCLUDED IN CONFERENCES (PREVIOUS SECTION).

1) FOREIGN (NON ITALIAN OR PORTUGUESE) INVITATIONS:

- Pierre et M. Curie (Paris VI) University, Faculty of Science, May 1971.
- Pierre et M. Curie (Paris VI) University, Faculty of Science, Feb. 1974.
- Paris–Nord University, Math. Department, Paris, Oct. 1978.
- Univ. Innsbruck, Math. Dept., Nov. 1978.
- Labotatoire Analyse Numérique, Univ. Pierre et M. Curie, Paris VI, June 1979.
- Bonn University, Mathematical Dept., July 1980.
- Univ. Paris-Orsay, Fac. Science, Paris, June 1981.
- Chicago University, Math. Department, Oct. 1981.
- Univ. Wisconsin–Madison, Math. Department, Nov. 1981.
- Brown University-Providence, Math. Department, Feb. 1982.
- Univ. of Massachusetts (Amherst), Dept. of Math. and Statistics, February 1982.
- Courant Institute of Mathematical Sciences–New York University, Feb. 1982.
- Purdue University-Indiana, Dept. Mathematics, March 1982.
- School of Mathematics, University of Minnesota-Minneapolis, April 1982.
- School of Mathematics- Univ. of Minnesota-Minneapolis, May 1982.
- École Normale Supérieure, Paris, Oct. 1984.
- Univ. Paris–Nord, Fac. of Science, Paris, Oct. 1984.
- Mathematics Research Center (MRC) and Math. Department joint Seminar, Univ. Wisconsin–Madison, Sept. 1985.
- Mathematics Research Center (MRC) and Math. Dept. joint Seminar, Univ. Wisconsin-Madison, Oct. 1985.
- School of Mathematics-Univ. of Minnesota-Minneapolis, Oct. 1985.
- Courant Institute of Mathematical Sciences–New York University, New-York, Nov. 1985.
- Pierre et M. Curie (Paris VI) University, Paris, Jan. 1988.
- Bonn University- Mathematical Institute, Bonn, June 1988.
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- Courant Institute of Mathematical Sciences–New York University, New-York, March 1991.
- Institute for Advanced Study (Princeton), March 1991.
- Collège de France (Paris), April 1991.
- Accademia Sinica-Chinese Academy of Sciences (Peking): September 1991.
- Xi'an Jiaotong University, Xi'an (China), September 1991.
- LOMI, Steklov Mathematical Institute of the Russian Academy of Science (S. Petersburg), September 1992.
- "Osaka Electric Communications University": Osaka, Japan, October 1992.
- Humboldt–Universität zu Berlin, Institut für Mathematik, Berlin, June 1997.
- Nara University, Nara (Japan), February 2006.
- Lab. Analyse Numérique-Pierre et Marie Curie University (Paris VI), February, 2006.
- OXFORD Centre for Nonlinear PDE, Oxford, April 24–May 1, 2008.
- LOMI, Steklov Mathematical Institute of the Russian Academy of Science, S. Petersburg, May 2012.
- Department of Applied Mathematics Donghua University-Shanghai, China, October 18, 2018.
- School of Mathematics Fudan University– Shanghai, China, October 19, 2018.
- The Institute of Mathematical Sciences The Chinese University of Hong Kong, Hong Kong (China), October 24, 2018.

2) ITALIAN AND PORTUGUESE INVITATIONS:

- Sc. Norm. Sup. Pisa, 5 lectures, 1972–73.
- Lab. Analisi Numerica CNR, Univ. Pavia, Jan. 1973.
- Lab. Analisi Numerica CNR, Univ. Pavia, Feb. 1994.
- Fac. Sc. Univ. Rome, 2 lectures, Dec. 1974.
- Fac. Sc. Univ. Genova, March 1975.
- Fac. Sc. **Univ. Genova**, June 1976.
- Fac. Sc. Univ. Trento, June 1976.
- Sc. Norm. Sup. Pisa, Feb. 1977.
- Lab. Analisi Numerica, **Univ. Pavia**, Jan. 1980.
- Fac. Sc. Univ. Milan, May 1980.

- Sc. Norm. Sup. Pisa, 2 lectures, May 1980.
- Lab. Analisi Numerica CNR, **Univ. Pavia**, April 1981.
- Centro di Analisi Globale, Univ. Florence, May 1981.
- Math. Dept., Univ. Florence, Nov. 1982.
- Math. Dept., **Univ. Rome I**, Dec. 1982.
- Sc. Norm. Sup. Pisa, Feb. 1983.
- Math. Dept., Univ. Florence, Feb. 1983.
- Math. Dept., **Univ. Rome I**, Dec. 1983.
- Math. Dept., Univ. Rome I, Jan. 1984.
- Physic Dept., Bologna Univ. (cycle of conferences), April 1984.
- Ph. D. Course at the International School for Advanced Studies (SISSA), Trieste, May 1984.
- Ist. Analisi Numerica CNR, Univ. Pavia, Nov. 1984.
- Ph. D. Course at the "International School for Advances Studies" (SISSA), Trieste, March 1985.
- Fac. Ing., Univ. Florence, Feb. 1986.
- Fac. Sc., Milan Univ., April 1986.
- Fac. Sc., Univ. Rome I, May 1986.
- Ist. Appl. Math., **Pisa Univ.**, Jan. 1987.
- Istituto per le Applicazioni del Calcolo, Rome, April 1987.
- Cycle of seminars at the "Half-year program on Evolution Equations", Math.
 Dept. and Sc. Normale Sup. Pisa, May 1987.
- Inst. Applied Math., Univ. Pisa, May 1987.
- Inst. Applied Math., Univ. Florence, March 1989.
- Fac. Sc., Univ. Rome I, March 1989.
- Math. Inst., L'Aquila Univ., March 1989.
- Instituto Sup. Técnico (Lisbona), March 1991.
- Fac. Sc. Univ. Rome I, April 1991.
- Math. Department, Univ. of Trento, March 1993.
- Math. Department, IST, Lisbon, March 1993.
- Math. Department, Univ. of Coimbra (Portugal), March 1993.
- CMAF, Univ. Lisbon, June 1995.
- Mathematics Dept., Univ. Trento, December 1995.
- CMAF, Univ. Lisbon, February 1996.
- Department of Mathematics IST, Lisbon, July 1997.
- Department of Mathematics, Univ. Ferrara, March 2001.
- CMAF, Lisbon University, January 2004.

- Math. Department, Florence University, Mai 2004.
- Math. Department, IST, Lisbon, Febbruary 2005.
- CMAF, Lisbon University, Febbruary 2005.
- CMAF, Faculty of Science, Lisbon University, June 2006.
- Math. Department, Univ. of Brescia, April 2008.
- Academia das Ciências de Lisboa, July 16, 2009.
- CMAF, Univ. Lisbon, February 18, 2010.
- CMAF, Univ. Lisbon, December 2, 2010.
- Mathematical Department, Univ. Roma "La Sapienza", Febbruary 9, 2011.
- CMAF, Univ. Lisbon, April 7, 2011.
- L'Aquila University, March 2015.
- Napoli-2 University (Caserta), February 2015.
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Pubblications in proceedings of scientific meetings and similars are not included except for n. 67 and n. 81 which contain new results, not published elsewhere.

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