March 7, 2022

Curriculum Vitae et Studiorum
of <u>Renato Spigler</u>

<u>Education</u>:

- <u>Scientific Highschool</u> (Venice, Italy), 1961-1966.

- <u>Italian "Laurea"</u> in Electronic Engineering, University of Padua, 1966-1972.

- <u>Specialization Diploma</u> in Theory and Applications of Computing Machines, University of Bologna, 1972-1974.

<u>Employments</u>:

- <u>Fellowship</u> from the Italian Ministry of Education, at the University of Padova [1], Novembre 1, 1972 - October 31, 1974.

- "<u>Contract</u>" with the Ministry of Education, at the University of Padua, November 1, 1974 - March 29, 1978 (with an interruption of 8 months for military duties).

- <u>Assistant</u> of "Metodi Matematici per l'Ingegneria", University of Padua, March 30, 1978 - March 26, 1985.

- <u>Associate Professor</u> of "Analisi Matematica", University of Padua, March 27, 1985 - October 31, 1991.

- <u>Associate Professor</u> of "Metodi Matematici per l'Ingegneria", University of Padua, November 1, 1991 - October 31, 1994.

- "<u>Professore Straordinario</u>" (i.e. Full Professor to be confirmed) of "Istituzioni di Matematiche" (with an option for "Analisi Numerica"), University of Salento [University of Lecce], November 1, 1994 - October 31, 1996.

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[1]Istituto di Matematica Applicata, then transformed into Dipartimento di Metodi e Modelli Matematici per le Scienze Applicate

- "Professore Straordinario" of "Analisi Matematica", University "Roma Tre" (the third University of Rome), November 1, 1996 - October 31, 1997.

- Professore Ordinario (permanently confirmed as a Full Professor) of "Mathematical Analysis", University "Roma Tre", November 1, 1997 to June 09, 2013.

- Professore Ordinario (permanently confirmed as a Full Professor) of "Numerical Analyisis", University "Roma Tre", from May 27, 2013 to October 31, 2018.

- Also, appointed Professor of Mathematics [Numerical Methods], in the Faculty of Engineering of UTIU – Università Telematica Internazionale Uninettuno, from July 01, 2016. also in the 'Board of Professors' [Collegio Docenti] of UTIU, from April 2017; and member of the Disciplinary Council [Collegio di Disciplina], from ..., 2017.

- Associated to the Institute for Calculation Applications "Mauro Picone" (IAC), of the Italian National Research Council (CNR), from August 21, 2017 throug December 31, 2019.

- "Senior Professor" at the Roma Tre University, from November 1, 2018.

- Associated to the Institute for Complex System (ISC), of the Italian National Research Council (CNR), from January 15, 2019 through December 31, 2021, for "project Ignitor".

- Associated to the Institute for Complex System (ISC), of the Italian National Research Council (CNR), from March 1, 2022 to December 31, 2023 for project "IGNITOR-ISC DFM.AD003.261.002".

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- "Honorary Fellow" at the Department of Mathematics, University of Wisconsin - Madison, WI, U.S.A., May 1980 - May 1981. [2]

- "Visiting Member" at the Courant Institute of Mathematical Sciences, New York University, New York, NY, U.S.A., May 1981 - September 1982.

- Fulbright Scholar at the Courant Institute of Mathematical Sciences, New York University, New York, NY, U.S.A., June 29, 1983 - September 30, 1985 [3]

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[2]On leave from the University of Padua.

[3]On leave from the University of Padua, through the Ministry of Foreign Affairs, to accomplish research work at the Courant Institute, June 1983 - September 1985.

- "Visiting Member" (Visiting Research Scientist) at the Courant Institute of Mathematical Sciences (Applied Mathematics Division), New York University, New York, NY, U.S.A., December 1, 1983 - October 31, 1984.

- "Associate Research Scientist" at the Courant Institue of Mathematical Sciences (Magneto - Fluid - Dynamics Division), New York University New York, NY, U.S.A., January 1 - August 31,1985; December 19, 1985 - January 9, 1986; July 7 - August 7, 1986.

- Invited to the Department of Mathematics, Virginia Polytechnic Institute (VPI) and State University, Blacksburg, VA, U.S.A., for one week, August 1986.

- "Visiting Research Scientist" at the Courant Institute of Mathematical Sciences (Magneto - Fluid - Dynamics Division), New York University, New York, NY, U.S.A., December 17, 1986 - January 12, 1987; March 30 - April 30, 1987; December 18, 1987-January 10, 1988; August 4 - September 16, 1988; December 19, 1988 - January 6, 1989.

- Invited to the Department of Mathematics, York University, Downsview, Ontario, Canada, August 17 - 29, 1987.

- Invited to India, February 22-March 21, 1988, by: the Department of Mathematics, University of Roorkee; the Department of Mathematics and the Centre for Atmospheric Science, Indian Institute of Technology (IIT), Delhi; the Department of Mathematics, Indian Institute of Technology, Bombay; the Department of Applied Mathematics, Indian Institute of Sciences (IISc), Bangalore.

- "Research Scholar" at the Department of Mathematics, Duke University, Durham, NC, U.S.A., August 23 - September 13, 1995.

- Member of the Professors' Council for the Ph.D. degree in "Matematica Computazionale e Informatica Matematica" [Computational Mathematics and Computer Science], University of Padova, Padua, Italy, November 14, 1986 - October 31, 1994,

- Member of the Professors' Council for the Ph.D. degree in Mathematics, University "Roma Tre", Rome, Italy, from November 1, 1999.

- Director of Graduate Studies [President/Coordinator of the Professor's Council] for the Ph.D. degree in Mathematics, University "Roma Tre", Rome, Italy, for the quadriennium 2006 - 2010.

- On Sabbatical Year from October 1, 2001, to September 30, 2003 (2 years), at the Department of Information Engineering, University of Padua, Padova (Italy).

- On leave from October 1, 2003, to September 30, 2004, at the University of Vienna and at the University of Padova.

- Three months Fellowship from the "Agència de Gestió d'Ajuts Universitaris i de Recerca" (Catalunya 2006, PIV-2006), to be spent at the "Universitat Rovira i Virgili", Tarragona, Spain, in 2007.

- Invited for 3 days/one week at BCAM, Bilbao (Spain), May 25-28, 2016.

- Host of a Visitor within the HPC-Europa's Transnational Visitor Programme, Dr Juan Acebrón, Department of Information and Technology ISCTE- Instituto Universitario de Lisboa, Portugal [Acebrón Juan, HPC173FSXM], December 1-22, 2018.

- On December 14, 2020, Approved Visit:
  Host of a Visitor within the HPC-Europa3 programme, Dr Francisco Bernal, Universidad Carlos III de Madrid, Madrid, Spain [Bernal Francisco, HPC173XD3A], for 9 weeks, in the period September–December 2021.

Fellowships and Financial Supports:

- "Grant" from EURATOM (Mobility Contract) for one month, to work on certain theoretical problems on Plasma Physics, at CEA[4], Grenoble, France, with Marco Brambilla, September - October 1978.

- Fellowship from the Italian C.N.R. [5] to be used Abroad, for Mathematical Sciences, for one year, to work with Wolfgang Wasow at the University of Wisconsin - Madison, WI, U.S.A., in the field of Asymptotic Analysis, May 1, 1980 - April 30, 1981.

- Fellowship from the Italian C.N.R., to be used Abroad, for Mathematical Sciences, for one year and three months, to work with George C. Papanicolaou, at New York University, in the field of Stochastic Differential Equations and Applications, May 1, 1981 - April 30, 1982. Final Prize from the C.N.R. (after the 2 years and 3 months with a C.N.R. Fellowship, 1980 - 82).

- "Seniores" Fellowship from the Italian C.N.R. to be used Abroad, for Mathematical Sciences, for four months, to continue the previous collaboration with G.C. Papanicolaou, July 1, 1983 - October 31, 1983. Final Prize from the C.N.R.

- Fulbright Travel Grant to the U.S.A. and financial contribution, in 1983.

- Fellowship for one month, under the NATO Senior Fellowships Scheme, Mathematics, for the previous collaboration, June 28 - July 28, 1984.

- Fellowship from the Italian C.N.R. of the type "Seniores", to be used Abroad, for Mathematical Sciences), for five months, to continue the previous collaboration with G.C. Papanicolaou, October 1, 1984 - March 2, 1985. Final Prize from the C.N.R..

- NATO Collaborative Research Grant (under the NATO Science Programme), with Stephen E. Cohn, Courant Institute of Mathematical Sciences, New York University, 1987 - 89 (2 years, renewable), to work on Boundary Value Problems for Degenerate and Singular Partial (Parabolic) Differential Equations.

- Responsible Scientist of the Operative Unity "Modelli Matematici di Plasmi, ed Applicazioni", within the C.N.R. Strategic Project "Innovazione Produttiva nelle Piccole e Medie Industrie"- Subproject: "Modelli Matematici per l'Industria", 1990 - 93.

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[4]Centre pour l'Energie Atomique.
[5]Consiglio Nazionale delle Ricerche.

- Responsible Scientist of the Padua group in the EC Project Human Capital and Mobility Programme, under contract ERBCHRXCT930413, EC Network, 1994 - 96: "Nonlinear Spatio-Temporal Structures in Semiconductors, Fluids, and Oscillators Ensembles" (research on Oscillators Ensembles).

- Obtained a financial support (Lit. 5 ML) from the Italian C.N.R., within the Strategic Project "Applicazioni della Matematica per la Tecnologia e la Società", in 1994.

- Financial support for one month (2,000 US $) from the Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, MN, U.S.A., for the special year 1994 - 95: "Waves and Scattering" (spent around September - October 1994).

- Financial support for two months from I.A.C.–C.N.R. for the special year above (used only in part).

- Granted a global contribution (up to Lit. 10 ML) from the Istituto Nazionale di Alta Matematica "F. Severi", to spend up to 4 months at the IMA, Minneapolis, in the special year above (not used).

- Bilateral Project supported by the C.N.R., under contract n. 95.01091.CT01 ("Nonlinear Dispersive Waves in Deterministic and Random Media"), with Prof. Stephanos Venakides, Duke University, Durham, NC, U.S.A., in 1995 (Lit. 8 ML).

- Fulbright Travel Grant to the U.S.A., granted in June 1994 (non used).

- Invited to the Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K., for the special year on "Exponential Asymptotics", January - June 1995 (only April 3-7, 1995).

- Associate Contractor, with Tecnomare S.p.A.–Venice, EC Project PACE – MaST III, under contract MAS3-CT95-0002, 1.2.1996 – 31.3.1999.

- Research Project (partly) supported by CASPUR (Consorzio per le Applicazioni del Supercalcolo) – Rome, 1998 - 99.

- Research Project supported by the UNESCO Venice Office, UVO – ROSTE, 1999, under contract UVO – ROSTE n. 875.629.9.

- Research Project (partly) supported by CASPUR – Rome, 1999 – 2000, and 2000 – 2001, inclusive of a Fellowship to support a young Post Doc, participating in the research.

- Research Project supported by the UNESCO Venice Office, UVO – ROSTE, 2000, under contract UVO – ROSTE n. 875.704.0.

- "Small Project", supported by the GNFM – INdAM, in 2001.

- Research Project within the "Coordinated Project Agenzia 2000", supported through the GNFM – INdAM, in 2001 – 2002.

- Research Project supported by the UNESCO Venice Office, UVO – ROSTE, 2001 – 2002, under contract UVO – ROSTE n. 875.646.2 (13).

- "Group Project", supported by GNFM (INdAM), 2005.

- Research project PRIN 2005, "Numerical modeling for scientific computing and advanced applications", 2006 - 2007, within the unit directed by M. Falcone (coordinator: A. Quarteroni).

- "Azioni Integrate Italia–Spagna", with J.A. Acebrón, University Rovira i Virgili, Tarragona, Spain, years 2007–2008.

- Research project PRIN 2007 on "Numerical Modeling for Scientific Computing and Advanced Applications", 2007 - 2009, within the unit directed by M. Falcone (A. Quarteroni coordinator).

- Participating to the Mobility Program in a "bilateral agreement for scientific and technological cooperation" (Italian-Portugal), between CNR and FCT, years 2009 - 2010 (responsible person: S. Succi, of the Italian CNR).

- Participation to the Portuguese project PTDC/EIA - CCO/098910/2008 (2009-2012), entitled "New parallel numerical algorithms for current and future high performance supercomputers", with J.A. Acebrón.

- PRIN 2009, within the unit directed by A. Pellegrinotti (E. Presutti coordinator), for the years 2011 - 2013.

- Granted by "Roma Tre" the "bonus for the year 2011" [incentivo anno 2011] (given upon selection to no more than 50 % of Professors and Researchers of "Roma Tre"), on March 22, 2016.

- Partecipation in the Paneuropean Research Network COST [within HORIZON 2020] "CA15225, Fractional-order systems; analysis, synthesis and their importance for future design";
  http://www.cost.eu/COST_Actions/ca/CA15225; Main Proposer:
  Dr Jaroslav Koton, `koton@feec.vutbr.cz`. Years 2016-2019 Nominated as *MC Substitute* [CA15225 IT] on July 21, 2017.

Membership of Scientific Associations

- Unione Matematica Italiana (UMI), from 1976. Appointed "Founding Member" on October 26, 2018.

- Società Italiana di Fisica (SIF), 1977-1991.

- American Mathematical Society (AMS), U.S.A., from 1979 to 2000.

- G.N.A.F.A. (Gruppo Nazionale per l'Analisi Funzionale e Applicazioni) of the C.N.R., 1977-1987.

- Membro del G.N.F.M. (Gruppo Nazionale per la Fisica Matematica) del C.N.R., from 1988.

- Associazione Italiana di Meccanica Teorica e Applicata (AIMETA), 1987-1993 (also member of Gruppo di Meccanica Computazionale and of Gruppo di Meccanica Stocastica).

- Society for Industrial and Applied Mathematics (SIAM), U.S.A., from 1988.

- Institute of Mathematics and its Applications (IMA), U.K., from 1988 to 2000.

- "Fellow" of the Institute of Mathematics and its Applications (IMA), U.K., elected on January 16, 1989; "Chartered Mathematician".

- European Consortium for Mathematics in Industry (ECMI), 1988-1991.

- Società Italiana di Matematica Applicata e Industriale (SIMAI), from 1990.

- Non-resident Member of the Ateneo Veneto, Venice, appointed on June 27, 1991 to 2000.

Membership of "Editorial Board" of scientific journals

- Editor-at-Large for Marcel Dekker, Inc., in the field "Applied, Computational and Industrial Mathematics", from July 16, 1990.

- Member of the Editorial Board of "SIAM News"[News journal of SIAM, the Society for Industrial and Applied Mathematics], 1993-2012.

- Member of the Editorial Board of the series "Encyclopedia of Mathematics", Cambdridge University Press, from June 13, 1994.

- Editor for the section of Applications of Mathematics to Physiscs and to other Natural Sciences, for the "Periodico di Matematiche", years 1998-2000.

- Member of the Editorial Board of the periodicals "Global Journal of Mathematical Sciences" (GJMS), and "International Journal of Pure and Applied Mathematical Sciences" (IJPAMS), GBS Publishers & Distributors (India).

- Member of the Editorial Board of "Differential Equations & Applications" (DEA), Element-Zagreb, Croatia; Editori-in-Capo: Mats Gyllenberg, Mervan Pasic, and Jean-Michel Rakotoson, from its foundation, 2009.

- Member of the Editorial Board of "Journal of Advanced Research in Differential Equations" (JARDE), of the Institute of Advanced Scientific Research (IASR).

- Editor" of E-BOOK and E-BOOK SERIES of Bentham Science Publishers (Bentham e-Books).

- Member of the Editorial Board of ISRN Mathematical Analysis, Hindawi Publishing Corporation.

- Member of the Board of SIMAI (Italian Society of Applied and Industria Mathematics), from September 18, 2007, to 2008; *Elected* Member from 2018 to 2020, and from 2020 to 2024.

- SIMAI Correspondent to the ICIAM News (from June 03, 2013).

- Member of the Scientific Committee of "J-NeuroTechnology" (Journal of Neurotecnology), from November 9, 2015.

- Member of the Editorial Board of the journal "Fractal & Fractional", Publisher: MDPI, from January 2017.

- Member of the Editorial Board of "Communications in Applied and Industrial Mathematics" [CAIM], the journal of the Italian Society for Applied and Industrial Mathematics (SIMAI), published in association with De Gruyter, from February 2017.

Referee for the following specialized periodicals:

- SIAM J. Math. Anal.;
- SIAM J. Numer. Anal.;
- SIAM J. Appl. Math.;
- J. Math. Anal. Appl.;
- Rend. Sem. Mat. Univ. Padova;
- Zeit. angew. Math. Mech. (ZAMM);
- Boll. Union. Mat. Ital.;
- Canad. Math. Bull.;
- Methods and Appl. of Anal.;
- Annals of Numerical Mathematics;
- J. Comp. Appl. Math.;
- European J. Appl. Math;
- J. Difference Equations;
- Rend. Ist. Mat. Univ. Trieste;
- J. Approx. Theory.;
- IMA J. Numer. Anal.;
- Europhysics Lett.;
- Physica D;
- Ann. Mat. Pura Appl.;
- Electron. J. Differential Equations;
- Complex Var. Elliptic Equ.;
- Nonlinear Dynam. (NODY);
- Math. Methods Appl. Sci.;
- J. Differential Equations;
- Discrete and Continuous Dynamical Systems;
- Math. Model. Anal.;
- Physica A;
- Adv. Difference Equ.;
- ISRN Mathematical Analysis;
- Appl. Math. Comput.;
- Differ. Equ. Appl.;
- Appl. Math. Model.;
- SIAM J. Control Optim.;
- Comput. Math. Appl.;
- Continental Shelf Research;
- J. Comput. Phys.
- Eur. J. Mech.- A/Solids;
- J. Supercomput.;
- International Journal of Machine Learning and Cybernetics;
- Numer. Alg.;
- Comm. Pure Appl. Anal.;
- J. Vibration Control;

- Neural Proc. Lett.;
- J. Nonlin. Sci.;
- ISRN Math. Anal.;
- J. Appl. Math. Computing;
- Frac. Calc. Appl. Anal.;
- Network: Comp. Neural Sys.;
- Anal. Appl. (Singap.);
- J. Comput. Methods Sci. Eng.;
- Ocean Engineering;
- Commun. Appl. Ind. Math.;
- Neural Computing and Applications;
- J. Inequal. Appl.;
- Int. J. Nonlinear Sci. Numer. Simul.;
- Math. Comput. Simulation;
- Math. Probl. Eng.;
- Cent. Eur. J. Math.
- British Journal of Mathematics and Computer Science
- Netw. Heterog. Media
- Proc. R. Soc. A
- Numer. Methods Partial Differential Equations
- International Journal of Modern Applied Physics - Rev. Mat. Complut.
- BIOMATH (International Journal on Mathematical Methods and Models in Biosciences – Punjab University Journal of Mathematics – declined (three times) – British Journal of Mathematics & Computer Science [BJMCS] – declined – Σ Mathematics - Open Access Journal, MDPI AG, Basel, – declined - Springer Plus - a Springer Open Journal
- Commun. Comput. Phys.
- J. Sci. Comput.
- Int. J. Comput. Math.
- Boundary Value Problems
- SIAM J. Appl. Dyn. Syst.
- Ain Shams Engineering Journal
- Calcolo (Springer) - declined
- Constr. Approx.
– ISA Transactions - declined
– Applied Mathematics (AM), Scientific Research Publishing - declined
- Neurocomputing
– Journal of King Saud Universiy – declined (March 2017)
– International Journal of Solids and Structures (IJSS) – declined
- Ricerche di Matematica
- Journal of Applied Analysis
- Inverse Problems
– Chaos, Solitons & Fractals – declined
- Journal of Engineering Mathematics

- The European Physical Journal Plus – declined
- Journal of Marine Science and Application – declined
- Zeitschrift für Angewandte Mathematik und Physik (ZAMP)
- Meccanica – declined
- SIAM J. Applied Algebra and Geometry – declined
- Fractal and Fractional
- Mathematics
- Open Journal of Applied Science (OJAppS) – declined
- Asian Journal of Mathematics and Computer Science (AJOMCOR)– declined
- Journal of Statistical Mechanics (JSTAT))
- Journal of Difference Equations and Applications (JDEA)
- Fractional Calculus and Applied Analysis (FCAA)
- Appl. Math. Comput. – declined
- Journal of Advanced Research – declined
- Journal of Thermal Biology
- Appl. Numer. Math. (APNUM)
- Archives of Mechanics (AoM)
- Mathematische Nachrichten
- AIMS Mathematics (AIMS Press)
- Ricerche di Matematica
- Mathematical Models and Methods in Applied Sciences (M3AS)
- Computational & Applied Mathematics

Project Reviewer:

- Reviewer of two "NATO Collaborative Research Grant", February 1990, <u>and</u> January 1992.

- Reviewer of a proposal to the International Science Foundation (U.S.A.), November 1993.

- Reviewer of the extension of a project supported by the "Austrian Science Fund" (FWF der Wissenschaften), in 2002.

- Independent Expert (Expert Evaluator <u>and</u> Rapporteur) to evaluate proposals within the sixth framework programme of the European Community, "FP6-2002-Mobility-1 Marie Curie Research Training Networks", appointment letter D(03)/577337RC59, December 11, 2003; also, appointment letter CT-EX2002B021249-101, September 30, 2005 (but then not summoned).

- 'Anonimous Reviewer' of publications concerning the years 2004 and 2005, for the "Research Evaluation, Year 2006" of the University of Modena and Reggio Emilia, April-May, 2007.

- Evaluator (expert in ICT) of research proposals in Joint Calls for The International Bureau of the Ministry of Education and Research of the Federal Republic of Germany (BMBF), at German Aerospace Center (DLR), for regional ERA-NET projects under the 7th Framework Programme, September 9, 2009.

- External Reviewer for proposals submitted to the 2009 Regular Research Funding Competition, of the National Fund for Scientific and Technological Development (FONDECYT) of the Chilean Government Commission for Scientific and Technological Development (CONICYT).

- FIRB Consultant, to evaluate Italian MIUR projects in the call 'Futuro in Ricerca', reserved to young researchers, 2009.

- Expert Evaluator of research programs funded by the Romanian National Council for Scientific Research (Romania), July 2011.

- Evaluator of a proposal for a future programme at the Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K., August 2011.

- Independent Expert for the evaluation of Science & Technology proposals, submitted to the Hellenic Republic Ministry of Education, Lifelong Learning & Religious Affairs Special Agency for the Management & Implementation of Research, Technological Development & and Innovation Actions (EYDE ETAK), under the action 'Cooperation 2011 - Partnerships of Production and Research Institutions in Focused Research and Technology Sectors', November 2011.

- Evaluator of Research Quality 2004-2010 (VQR 2004-2010), and 2011-2014, (VQR 2011-2014)- Mathematics and Computer Science, for the Italian "National Agency for the Evaluation of Universities and Research Institutes" (anvur), in 2012, 2013, and 2016.

- Remote Evaluator of project proposals submitted to the Latvian Science Council in 2012 (proposal No. 518/2012) November 2012.

- "Relator" in the Council to grant the a Ph.D. degree in 'Computational Engineering', Instituto Superior Técnico (IST), Lisbon, Portugal, November 30, 2012.

- Reviewer for the Ministry (MIUR) research Projects for the Program "Futuro in Ricerca 2013", *preliminary selection*, February 2013.

- Reviewer for CINECA for the *preliminary selection* of research projects "PRIN 2012", March 2013.

- Reviewer for the Ministry (MIUR) research Projects for the Program "PRIN 2012", July 2013.

- Project Evaluator of project a proposal submitted to the Latvian Science Council in 2013 (proposal No. 623/2014), November 2013.

- Member of a Committee to appoint an Associate Professor, University of Padua, September 2014.

- Member in the Committee to confer Doctoral degrees (Ph.D.) in Mathematical Models and Methods for Technology and Society, University of Rome – "Sapienza", in the year 2014.

- Expert Evaluator of a Ph.D. Thesis, to confer the pize, "Premio Tesi di Dottorato 2015", by SUE (Sapienza Università Editrice.

- External Reviewer to evaluate a research proposal for the Research Grants Council (RGC) of Hong Kong, March 2016 – declined.

- Evaluator of Research Quality 2011-2014 (VQR 2011-2014), for the Italian "National Agency for the Evaluation of Universities and Research Institutes" (ANVUR), in 2016.

- Invited to the "Council of Canadian Academies" Survey of Research Strengths (by EKOS Research Associates Inc.), 'as an author of one of the top 1% most highly cited papers in my field worldwide', as a 'leading researcher", July 28, 2016.

- Appointed *External Expert Reviewer* of a publication candidated to al the 'Annual Prize for Young Scholars for the best publication' conferred by the University of Perugia, September? 2016.

- Member of a Committee to select a "temporarily appointed Researcher", University of Turin, October 12-13, 2016.

- In the list of respondents for the "QS World University Rankings", on behalf of the Novosibirsk State University (NSU), Novosibirsk, Russia, for the Years 2015-2016, *and* 2017-2018.

- Scientific evaluation of a proposal: "ACS Proposal Review Request No. 57956-UR 9", by ACS Petroleum Research Fund, American Chemical Society; received: February 10 2017, due: March 24, 2017.

- Contacted by the University of Alcalá (Spain) to participate in the "QS Global Academic Reputation Survey 2017".

- Member of the Committee to confer a Doctoral degree (Ph.D.) in Mathematics, German University in Cairo (Egypt), June 7, 2017.

- President of a Committee to appoint an Associate Professor in Numerical Analysis, at the Telematic International University Uninettuno (UTIU), Rome, August-September 2017.

- Evaluation of a PhD dissertation in Aeronautical and Space Engineering, Sapienza Università di Roma, November 2018.

Miscellaneous activities:

- "Reviewer" for the Mathematical Reviews ('mathrev', MR), American Mathematical Society, from February 2007 to date.

- "Reviewer" of Zentralblatt MATH, from Fetruary 2018 to date.

- Taught an elementary Course of Logic (9 lectures) to Highschool Teachers, at Istituto "G. Giorgi", Verona, January 16, 23, and 30, 1986.

- Expository writing as a scientific columnist (about Mathematics and its Applications), from June 1987, on major Italian newspapers, such as "La Stampa" (section: Tuttoscienze), "Il Giornale nuovo", "La Repubblica", and "Il Gazzettino".

- "IPAZIA, MARTIRE PAGANA tra politica e religione", *Le Stelle*, no. 143, June 2015, pp. 64-65.

- Obituary for Monroe Donsker, SIAM News, Vol. 25, No. 2, March 1992, p. 2.

- Foreword to: "Lectures on probability and second order random fields", by Diego Bricio Hernández, Series on Advances in Mathematics for Applied Sciences, 30, World Scientific, River Edge, NJ, 1995, xiv + 146 pp.

- Obituary for Cathleen Synge Morawetz (1923-2017) [almost exactly reported from the Amer. Math. Society's online news], "MaddMaths!" [Matematica Divulgazione Didattica], Agosto 2017 (in Italian), http://maddmaths.simai.eu/news-2/scomparsa-di-morawetz/

- Book Reviews for "Le Scienze" (the Italian edition of "Scientific American"):

  — "Chi si è seduto sulla sedia di Einstein?", by Ed Regis, Frassinelli, Piacenza, 1990, 355 pp. ("Le Scienze", n. 265, September 1990, pp. 94-95);

  — "Pensieri discreti", by Gian-Carlo Rota , Garzanti, Milan, 1993) ("Le Scienze", n. 302, October 1993, pp. 98-99 e 102);

  — "Pentole, ombre, formiche", by Emma Castelnuovo, La Nuova Italia, Scandicci (Florence), 1993 ("Le Scienze", n. 304, December 1993, pp.101-102);

  — "Avventure di un matematico", by Stanislaw M. Ulam, Sellerio, Palermo, 1995 ("Le Scienze", n. 329, January 1996, pp. 96-97);

  — "Il mondo come gioco matematico. John von Neumann, scienziato del Novecento", by Giorgio Israel and Ana Millán Gasca, La Nuova Italia

Scientifica, Rome, 1995 ("Le Scienze", n. 339, November 1996, pp. 140-142);

— "Cervelli d'Italia", by Riccardo Chiaberge, Sperling & Kupfer, Milan, 1996 ("Le Scienze", n. 340, December 1996, pp. 111-112);

— "Caos" (undertitle: 'La nascita di una nuova scienza'), by James Gleick, Sansoni, Milan, 1996 ("Le Scienze", n. 341, January 1997, p. 107);

— "Teoria dell'Informazione", by several authors, Tessere CUEN, Naples, 1996 ("Le Scienze", n. 342, February 1997, pp.108-109);

— "Saggio storico di elettromagnetismo 1821-'22" of Michael Faraday, by Paolantonio Marazzini and Pasquale Tucci, Tessere CUEN, Naples, 1996 ("Le Scienze", n. 347, July 1997, pp.117);

— "Indiscrete Thoughts", by Gian-Carlo Rota (Fabrizio Palombi Editor), Birkhäuser, Boston, 1997 ("Le Scienze", n. 360, August 1998, pp. 102-104);

— "Il genio dei numeri" (undertitle: 'Storia di John Nash, matematico e folle'), by Sylvia Nasar, Rizzoli, Milan, 1999 ("Le Scienze", n. 374, October 1999, pp. 112-113);

— "Le gioie del π", by David Blatner, Garzanti, Milan, 1999 ("Le Scienze", n. 375, November, 1999, pp.132-133.);

— "Il Vangelo secondo la Scienza" (Le religioni alla prova del nove), di Piergiorgio Odifreddi, Einaudi, Torino, 1999 ("Le Scienze", n. 384, August 2000, pp. 116-117);

— "Labyrinth of Thought" (A History of Set Theory and its Role in Modern Mathematics), by José Ferreirós, Birkhäuser, Basel, 1999 ("Le Scienze", n. 386, October 2000, p. 116);

— "Le più grandi invenzioni degli ultimi due millenni", by John Brockman, Garzanti, Milan, 2000 ("Le Scienze", n. 389, January 2001, pp. 103-104);

— "Einstein. The formative years, 1879-1909", Don Howard and John Stachel, editors, Birkhçulturauser, Boston, 2000 ("Le Scienze", n. 390, February 2001, p. 106 - short review);

— "Essays on the Future. In Honor of Nick Metropolis", Siegfried S. Hecker and Gian-Carlo Rota, editors, Birkhäuser, Boston, 2000, 276+XVI pages ("Le Scienze", n. 399, November 2001, p. 135).

- Article "*Peer-Reviewing and Electronic Publishing*", High Energy Physics Libraries Webzine, issue 6, March 2002.

[URL: http://library.cern.ch/HEPLW/6/papers/5/]

- Review of the "Proceedings of the Fifth European Conference on Mathematics in Industry", Matti Heiliö (Editor), B.G. Teubner, Stuttgart, <u>and</u> Kluwer Academic Publishers, Dordrecht, 1991, 400+x pp., ISBN 0-7923-1317-8, for "Meccanica", *Meccanica* **28**, No. 2 (1993), p. 160.

[http://link.springer.com/article/10.1007]

- Review of the monograph "The Solution of a One-Dimensional Stefan Problem", by C. Vuik, CWI/Tract 90, Stichting, Mathematisch Centrum, Amsterdam, 1993, 134 pp.,ISBN 90-6196-419-9, for "Zeit. angew. Math. Mech." (ZAMM), *ZAMM - Zeit. angew. Math. Mech.* **75**, No. 3 (1995), 206.

- Preliminary report on a book submitted for publication to Marcel Dekker, June 1994.

- Book review of "La potenza motrice del fuoco", of Sadi N. Carnot, by Bruno Jannamorelli, Tessere CUEN, Naples, 1996, on: Il Nuovo Saggiatore (Bollettino della Società Italiana di Fisica), Vol. 13 July-August 1997, n. 4, p. 50.

- On chief of the section on Applications of Mathematics to Physics and to Natural Scieces, "Periodico di Matematiche", for the term 1998-2000.

- "Culture Prize" (from the President of the Ministries Council Italian Government), for the year 1997 (Lit. 2 ML); also for the year 2000 (Lit. 2 ML); also for the year 2003 (1,000 Euro).

- Columnist of "Notiziario SIMAI" (Notices of the Italian Association of Applied and Industrial Mathematics), from October 2002.

- Member of the Committee ["Tribunal"] to confer a Ph.D. degree in Mathematics [to Guido Dell'Acqua], Universidad Carlos III de Madrid, Madrid, Spain, February 15, 2007.

- Member of the Board of Directors of SIMAI (Società Italiana di Matematica Applicata e Industriale), since September 18, 2007 to 2008.

- Member of the Technical-Scientific Council of CASPUR (Consorzio interuniversitario per le Applicazioni di Supercalcolo per Università e Ricerca), since June 20, 2008.

- Corrispondent for SIMAI concerning ICIAM News (from June 3, 2013).

- SIMAI representative within ECCOMAS' Committee for Applied Computational Mathematics, since May 5, 2014.

- Review of the monograph "Asymptotic analysis of linear dynamic equations: Extensions of Levinson's theory for differential and difference equations", by S. Bodine and D.A. Lutz, for Springer, (May-July) 2014.

- <u>Elected</u> Board Member of SIMAI (the 'Italian Society for Applied and Industrial Mathematics') for the quadrennium 2017-2020 (on December 16, 2016).

- Opinion (referee-like) requested by "Physics Today" on the merit of coverage of some scientific work, May 2017.

- Coordinator of FIMA, The Italian Federation of Applied Mathematics, (including SIMAI, AIRO, AMASES, AILA, and AIMETA), from February to November 2017.

- Founder of the interdepartmental interdisciplinary Roma Tre University's Research Group named *NeuralNet*, February 2017.

- Responsible person of the Collaborative Agreement between the Roma Tre University and Neulos Visiotech srl, April 11, 2017 – April 10, 2020 (3 years).

- President of FIMA, The Italian Federation of Applied Mathematics, (including SIMAI, AIRO, AMASES, AILA, AIMETA, with the admission of AICA), elected on December 4, 2017, for the biennium 2018-2019.

Congresses and Seminars:

- "LIX Congresso Nazionale della S.I.F." [6], Florence, 1973 (communication, October 2, 1973).

- "LX Congresso Nazionale della S.I.F.", Bologna, 1974 (communication, October 2, 1974).

- Attended C.N.R. Summer Courses in Mathematics, University of Perugia, July-August, 1974.

- Attended the Varenna School on Controlled Thermonuclear Fusion, Varenna (Como), September 1974.

- "LXI Congresso Nazionale della S.I.F.", Lecce, 1975 (communication presented by a coauthor, September 28, 1975).

- 2nd International Congress on Waves and Instabilities in Plasmas, Innsbruck, Austria, March 17-21, 1975 (communication presented a by coauthor).

- 8th European Conference on Controlled Fusion and Plasma Physics, Prague, Czechoslovakia, September 19-23, 1977 (communication).

- "XI Congresso dell'U.M.I." [7], Palermo, September 24-29, 1979 (communication).

- Mathematical Conference on the centenniall of the Birthdays of Guido Fubini and Francesco Severi, Accademia delle Scienze di Torino, Turin, October 8-10, 1979.

- "LXV Congresso Nazionale della S.I.F.", Ancona, 1979 (communication, October 5, 1979).

- Advanced Seminar on Singular Perturbations and Asymptotics, May 28-30, 1980, <u>and</u> Short Course on Singular Perturbation: Theory and Applications for Differential Equations, May 27, 1980, Madison, WI, U.S.A.

- 781st Meeting of the A.M.S.[8], October 31-November 1, 1980, Kenosha, WI, U.S.A.

- 782nd Meeting of the A.M.S., November 14-15, 1980, Knoxville, TN, U.S.A.

- 87th Annual Meeting of the A.M.S., January 7-10, 1981, San Francisco, CA, U.S.A.

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[6]Società Italiana di Fisica.
[7]Unione Matematica Italiana.
[8]American Mathematical Society.

- Conference on the Macroscopic Properties of Disordered Media, June 1-3, 1981, New York University, Courant Institute of Mathematical Sciences, New York, NY, U.S.A.

- Mathematical Frontiers and the Physical World, Symposium on the 80th Birthday of K.O. Fiedrichs, Courant Institute of Mathematical Sciences, New York, NY, U.S.A., October 30-31, 1981.

- 783rd Meeting of the A.M.S., March 16-17, 1982, Bryn Mawr, PA, U.S.A. (communication).

- <u>Invited Lecture</u> at York University, Downsview, Ontario, Canada, April 13, 1982.

- Given a Seminar at the Courant Institute of Mathematical Sciences (Applied Mathematics Seminar), New York University, New York, NY, U.S.A., April 21, 1982.

- 86th Summer Meeting of the A.M.S., August 23-26, 1982, Toronto, Canada (communication).

- "Convegno di Analisi Numerica", Bologna, March 28-30, 1983 (communication).

- "LXIX Congresso Nazionale della S.I.F.", Messina, October 21-26, 1983 (sent a communication, unable to attend).

- Conference on "Computer Algebra as a tool for research in Mathematics and Physics", April 5-6, 1984, New York University, Courant Institute of Mathematical Sciences, New York, NY, U.S.A.

- 1984 Sherwood Theory Conference, Annual Controlled Fusion Theory Conference, April 11-13, 1984, Incline Village, NV, U.S.A. (poster presented by the coauthor, W. Grossmann).

- "Workshop on Mathematical Aspects of Fluids and Plasma Dynamics", Trieste, May 30- June 2, 1984 (communication presented by the coauthor, W. Grossmann).

- "LXX Congresso Nazionale della S.I.F.", Genoa, October 4-9, 1984 (sent a communication, unable to attend).

- 26th Annual Meeting of the Division of Plasmas Physics, A.P.S.[9], October 29-November 2, 1984, Boston MA, U.S.A. (poster presented by the coauthor, W. Grossmann).

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[9] American Physical Society.

- Invited Lecture and Colloquium at York University, Downsview, Ontario, Canada, November 27 and 29, 1984.

- 91th Annual Meeting of the A.M.S., January 9-13, 1985, Anaheim, CA, U.S.A. (communication).

- Invited Colloquium at the Rensselaer Polytechnic Institute (R.P.I.), Troy, NY, U.S.A., March 25, 1985.

- International Conference on Stochasticity and Turbulence in Plasmas, Santa Barbara, CA, U.S.A., March 26-29, 1985 (presented a poster).

- Given a Seminar at the Courant Institute of Mathematical Sciences (Magneto-Fluid-Dynamics Seminar), New York University, New York, NY, U.S.A., April 4, 1985.

- 1985 Sherwood Theory Conference, Annual Controlled Fusion Theory Conference, April 15-17, 1985, Madison, WI, U.S.A. (poster presented by the coauthor, W. Grossmann).

- Given a Seminar at the Courant Institute of Mathematical Sciences (Applied Mathematics Seminar), New York University, New York, NY, U.S.A., April 18, 1985.

- Invited paper at the International AMSE Conference on Modelling and Simulation, Storrs, CT, U.S.A., July 1-3, 1985.

- EQUADIFF-6, 6th Czechoslovak Conference on Differential Equations and Their Applications, Brno, Cecoslovacchia, 26-30 Agosto 1985 (sent a communication, unable to attend).

- "LXXI Congresso Nazionale della S.I.F.", Trieste, October 3-8, 1985 (sent a communication, unable to attend).

- 1985 Fall Meeting of the Division of Plasma Physics, APS, November 4-8, 1985, San Diego, CA, U.S.A. (poster presented by the coauthor, W. Grossmann).

- Invited Seminar at the University of Provence, Marseille, France, March 11, 1986.

- STATPHYS-16, Boston, MA, U.S.A., August 10-16, 1986 (communication).

- Invited Seminar at the University of Colorado, Boulder, CO, U.S.A., September 16, 1986.

- "LXXII Congresso Nazionale della S.I.F.", Padua, October 2-7, 1986, (two communications).

- 28th Annual Meeting of the A.P.S., Division of Plasma Physics, Baltimore, MD, November 3-7, 1986 (poster presented by the coauthor, W. Grossmann).

- 1987 Sherwood Theory Conference, Annual Controlled Fusion Theory Conference, April 6-8, 1987, San Diego, CA, U.S.A. (sent an abstract, unable to attend).

- "Secondo Convegno Italiano di Meccanica Computazionale" (AIMETA [10]), Rome, June 2-5, 1987 (communication).

- 1987 IEEE AP-S (Antennas and Propagation Society) International Symposium and URSI Radio Science Meeting, Virginia Tech, Blacksburg, VA, U.S.A., June 15-19, 1987 (communication presented by the coauthor, W.E. Kohler).

- 14th European Conference on Controlled Fusion and Plasma Physics, Madrid, Spain, June 22-26, 1987 (presented a poster).

- EQUADIFF 87, Conference on Differential Equations, Xanthi, Greece, August 24-28, 1987 (sent <u>2</u> communications, unable to attend).

- "XIII Congresso Nazionale dell'U.M.I.", Turin, September 3-9, 1987 (presented <u>3</u> communications).

- 1° Convegno di Meccanica Stocastica (AIMETA) on "Models for Reliability Analysis of Mechanical Systems", R.I.N.A., Genoa, 23 Ottobre 1987 (communication).

- <u>Invited Seminars</u> (<u>2</u> seminars) at the Department of Mathematics, University of Roorkee, Roorkee, India, February 24 <u>and</u> 25, 1988.

- <u>Invited Seminars</u> (<u>4</u> seminars) at the Department of Mathematics <u>and</u> the Centre for Atmospheric Science, Indian Institute of Technology (IIT) - Delhi, India, March 11 <u>and</u> 21, 1988.

- <u>Invited Seminars</u> (<u>2</u> seminars) at the Department of Mathematics, Indian Institute of Technology (IIT) - Bombay, India, March 14, 1988.

- <u>Invited Seminars</u> (<u>2</u> seminars) at the Department of Applied Mathematics, Indian Institute of Sciences (IISc) - Bangalore, India, March 17, 1988.

- "2° Convegno di Meccanica Stocastica" (AIMETA[10]) on "Elementi Finiti Stocastici", Centro Ricerche FIAT, Orbassano (Turin), April 29, 1988.

- <u>2</u> <u>invited seminars</u> at the Dipartimento di Matematica, University of Lecce, May 26 <u>e</u> 27, 1988.

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[10]Associazione Italiana di Meccanica Teorica e Applicata.

- BAIL V Conference (The Fifth International Conference on Boundary and Interior Layers - Computational and Asymptotic Methods), Shanghai, China, June 20-24, 1988 (communication).

- <u>Invited Seminar</u> at the Computing Centre - Academia Sinica, Beijing, China, July 1, 1988.

- <u>Invited Seminar</u> at the Department of Mathematics, Peking University (BEIDA), Beijing, China, July 2, 1988.

- 12th IMACS World Congress on Scientific Computation, Paris, France, July 18-22, 1988 (<u>solicited paper</u> presented in the session on "Stochastic Systems Modelling").

- ICCAM 88, 3rd International Congress on Computational and Applied Mathematics, Leuven, Belgium, July 25-29, 1988 (communication).

- "Convegno Nazionale di Analisi Numerica" (C.N.A.N.), Rome, September 26-28, 1988 (communication).

- "IX Congresso Nazionale dell'AIMETA", Bari, October 4-7, 1988 (communication).

- "Convegno di Fisica Matematica in onore del Prof. Antonio Pignedoli", Bologna, October 21-22, 1988 (only one day).

- Giornata di lavoro su (one-day workshop on): "Modellistica Matematica per le Applicazioni Industriali e Tecnologiche", Rome, December 12, 1988.

- <u>Invited Seminar</u> at the Department of di Mathematics, University of Rome-Tor Vergata, February 27, 1989.

- <u>Invited Seminar</u> at the Department of Mathematics and Applications "Renato Caccioppoli", University of Naples, February 28, 1989.

- "Applicazioni Industriali e Tecnologiche della Matematica e Matematica Computazionale", final meeting on activities of Strategical Projects 1987, Rome, May 2-4, 1989 (only one day).

- "Fourth ECMI-Meeting on Industrial Mathematics", May 29-June 2, 1989, St. Wolfgang, (Upper) Austria.

- "International Symposium on Asymptotics and Computational Analysis", June 5-7, 1989, celebrating the Sixthy-Fifth Birthday of Frank W.J. Olver (<u>invited communication</u>), <u>and</u> "Tenth Annual Meeting of the Canadian Applied Mathematics Society", June 7-9, 1989, Winnipeg, Manitoba, Canada.

- "EUROMECH 250", European Mechanics Colloquium, Nonlinear Structural Systems Under Random Conditions, Villa Olmo, Como, June 19-23, 1989 (<u>invited comunicazione</u>).

- "1989 SIAM Annual Meeting", July 17-21, 1989, San Diego, CA, U.S.A.

- Promoter and Organizer of the international conference "Venice-1/Symposium on Applied and Industrial Mathematics", Island of San Servolo, Venice, Italy, October 2-6, 1989.

- <u>Invited Seminar</u> at the Workshop on "Probabilistic Mathematical Methods in Applied Sciences", Polytechnic of Turin, Turin, Italy, December 4-5, 1989.

- Convegno "Il pensiero matematico nella cultura e nella società italiana degli anni '90", March 29-30, 1990, University Bocconi, Milan, Italy (<u>invited conference</u>, March 30, 1990).

- "Conference on Nonlinear Partial Differential Equations", April 18-20, 1990, Padua, Italy.

- "Parallel Computing: Achievements, Problems and Prospects", International Conference, Capri (Naples), Italy, June 3-7, 1990 (only one day).

- "ECMI 90", Fifth Annual Conference of the European Consortium for Mathematics in Industry, June 6-9, 1990, Lahti, Finland.

- Promoter and Organizer of the Summer School "Advanced Seminar on Mathematical Modelling in Plasma Physics", Ateneo Veneto, Venice, Italy, June 18-29, 1990.

- "1990 SIAM Annual Meeting", July 16-20, 1990, Chicago, IL, U.S.A.

- "Giornate di Analisi Numerica", L'Aquila, Italy, September 5-7, 1990.

- "X Congresso Nazionale dell'AIMETA", Pisa, Italy, October 2-5, 1990.

- Promoter and Organizer of the workshop "Giornata d'incontro sulla Matematica per l'Industria", Istituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, May 3, 1991.

- Promoter and Organizer of the Summer School "Advanced Seminar on Applied Mathematics", Ateneo Veneto, Venice, Italy, June 17-28, 1991.

- "ICIAM '91" (The Second International Conference on Industrial and Applied Mathematics), Washington, DC, U.S.A., July 8-12, 1991 (communication, <u>and</u> organized a minisymposium).

- <u>Invited Conference</u>, celebrating the 125th death anniversary of G.B.F. Riemann, Verbania, Italy, July 20, 1991.

- "13th IMACS World Congress on Computation and Applied Mathematics", Trinity College, Dublin, Ireland, July 22-26, 1991 (<u>solicited</u> <u>paper</u>).

- "ECMI 91", Sixth Annual Conference of the European Consortium for Mathematics in Industry, Limerick, Ireland, August 27-31, 1991.

- "International Conference on Parallel Methods for Ordinary Differential Equations: The State of the Art", Grado, Italy, September 10-13, 1991 (only one day).

- "XIV Congresso Nazionale dell'UMI", Catania, Italy September 19-25, 1991 (<u>4</u> communications).

- <u>Invited Seminar</u> at the Dipartimento di Matematica, University of Pisa, January 24, 1992.

- <u>Invited Seminar</u> at the Escuela Politécnica Superior, Universidad Carlos III de Madrid, Madrid, Spain, April 22, 1992.

- "I Congresso Nazionale della SIMAI" (Società Italiana di Matematica Applicata e Industriale), Florence, Italy, June 1-5, 1992 (communication).

- "Sixth International Conference in Domain Decomposition Methods in Science and Engineering", Villa Olmo, Como, June 15-19, 1992 (only two days).

- Scientific Meeting on "Modelli e metodi matematici in teoria del trasporto e fluidodinamica", Parma, Italy, June 19-20, 1992 (communication).

- Second Conference for the first International Prize "Georg Friedrich Bernhard Riemann", Verbania, Italy, July 18, 1992.

- "SIAM 40th Anniversary Meeting", July 20-24, 1992, Los Angeles, CA, U.S.A. (communication).

- "Innovative Methods in Numerical Analysis", September 7-11, 1992, Bressanone, Italy.

- "1st Workshop on Stochastic Numerics", September 7-12, 1992, Gosen (Berlin), Germany (<u>invited paper</u>, unable to attend).

- "AIMETA '92", XI Congresso Nazionale dell'Associazione Italiana di Meccanica Teorica ed Applicata, Trento, Italy, September 28 - October 2, 1992 (communication).

- Scientific Meeting on "Modelli e metodi matematici in teoria del trasporto e fluidodinamica", Udine, Italy, November 1992 (communication).

- "Recent Advances in Numerical Methods for Partial Differential Equations", Conference in honour of F. Scarpini for his 70th birthday, Rome, January 7-9, 1993 (communication).

- "ECMI 93", Seventh Annual Conference of the European Consortium for Mathematics in Industry, Montecatini Terme, Italy, March 2-6, 1993.

- Invited Seminar, University of Bologna at Cesena, Cesena, Italy, May 12, 1993.

- SIAM "Second International Conference on Mathematical and Numerical Aspects of Wave Propagation", June 7-10, 1993, University of Delaware, Newark, DE, U.S.A. (extended abstract sent and accepted for presentation, unable to attend).

- Scientific Meeting on "Modelli e metodi matematici in teoria del trasporto e fluidodinamica", Florence, Italy, June 18-19, 1993 (communication).

- "1993 SIAM Annual Meeting", July 12-16, 1993, Philadelphia, PA, U.S.A. (communication, July 14, 1993, and organized a minisymposium on "Synchronization Phenomena in Populations of Nonlinear Random Oscillators", July 13, 1993).

- EQUADIFF-8, Czecho-Slovak Conference on Differential Equations and Their Applications, Comenius University, Bratislava, Slovakia, August 24-28, 1993, (invited paper).

- "New Aspects of Numerical Analysis in the Light of Recent Technology", an International Conference for the 75th Birthday of Marco Cugiani, Stresa, Italy, September 13-18, 1993.

- International Meeting on "Ordinary Differential Equations and their Applications", on the occasion of the 70th Birthday of Roberto Conti and Gaetano Villari, Florence, Italy, September 20-24, 1993 (only one day).

- "VII International Conference on Waves and Stability in Continuous Media", Bologna, Italy, October 4-9, 1993 (only one day).

- "International Joint Symposium on Special Functions and Artificial Intelligence", dedicated to Luigi Gatteschi and Francesco Lerda on the occasion of their 70th Birthday, Turin, Italy, October 14-15, 1993 (invited to the round table of October 15, 1993).

- Attended to a ceremony and to two conferences in honor of Enrico Magenes, Pavia, Italy, October 18, 1993.

- <u>Invited Seminar</u> by Mathesis (Italian mathematical teachers association), University of Padua, October 22, 1993.

- Scientific Meeting of "Gruppo Nazionale per la Fisica Matematica" (GNFM) of the C.N.R., Rome, October 25-27, 1993.

- Workshop "Bioremediation di suoli industriali contaminati", Bologna, Italy, March 16, 1994 (presented <u>poster</u>, with M.C. Dacome).

- "Convegno Nazionale di Analisi Numerica", Montecatini Terme, Italy, April 27-29, 1994.

- Organizer of the workshop Giornate d'incontro on "Modelli e Metodi Matematici in Teoria del Trasporto ed in Fluidodinamica", Padua, Italy, May 13-14, 1994.

- "Space Missions and Astrodynamics III", Polytechnic of Turin, June 20-21, 1994 (only one day).

- "1994 SIAM Annual Meeting", July 25-29, 1994, San Diego, CA, U.S.A. (<u>invited communication</u> in the minisymposium "Special Functions and Asymptotics", July 29, 1994).

- September 6-23, 1994 at the Institute for Mathematics and its Applications (IMA), Minneapolis, MN, U.S.A.: attended to the <u>tutorial</u> on "Computational Wave Propagation", September 7-9, 1994, <u>and</u> to the <u>workshop</u> with the same title, September 19-23, 1994.

- "Mathematics meets Italian Industry" (ECMI), Milano, September 26-27, 1994 (only one day).

- October 10-22, 1994 at the Institute for Mathematics and its Applications (IMA), Minneapolis, MN, U.S.A.: attended to the <u>tutorial</u> on "underlineWavelets, Multigrid and other Fast Algorithms (Multipole, FFT) and <u>their Use in Wave Propagation</u>", October 11-13, 1994, <u>and</u> to the <u>workshop</u> with the same title, October 17-21, 1994.

- "ITLA 95", Italian-Latinamerican Conference in Applied and Industrial Mathematics, January 4-6, 1995, Porto Alegre, Rio Grande do Sul, Brasil (<u>invited</u> <u>main speaker</u>).

- <u>Invited Seminar</u> at IMPA (Instituto de Matemática Pura e Aplicada), Rio de Janeiro, Brasil, January 10, 1995.

- Meeting on "Equazioni di evoluzione e applicazioni alla teoria del trasporto e alla biologia", Rome, February 23-25, 1995.

- Pedagogical <u>Invited</u> Conference at the University of Lecce, Italy, March 3, 1995.

- "SciCADE 95", International Conference on Scientific Computation and Differential Equations, March 28-April 1, 1995, Stanford University, Stanford, CA, U.S.A. (<u>solicited</u> <u>paper</u>).

- "Exponential Asymptotics 1995": 'Topics in Asymptotic Analysis', 4th-6th April, 1995, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom (<u>invited</u> <u>seminar</u>, April 6, 1995).

- Second International Conference on Difference Equations and Applications (SICDEA), Veszprém, Hungary, August 7-11, 1995 (<u>invited</u> <u>contributed</u> <u>paper</u>).

- Visiting at the Department of Mathematics, Duke University, Durham, NC, U.S.A., August 23-September 13, 1995, for research collaboration with S. Venakides, within the C.N.R. Bilateral Project, under contract n.95.01091.CT01.

- Given a talk seminar in the "PDE/Applied Math. Seminar", Department of Mathematics, Duke University, Durham, NC, U.S.A., September 4, 1995.

- "XV Congresso Nazionale dell'UMI", Padua, September 11-16, 1995 (communication presented by the coauthor, F. Sartoretto).

- "1995 SIAM Annual Meeting", October 23-26, 1995, Charlotte, NC, U.S.A. (sent a communication, unable to attend).

- Organized a Network Meeting for the European Project "EC Human Capital and Mobility Programme", contract n.ERBCHRXCT930413, Ateneo Veneto, Venice, Italy, March 29, 1996.

- April 28 - May 5, 1996, Visiting Professor at the Universidad Carlos III de Madrid, madrid, Spain, for collaborating in research with L.L. Bonilla, within the European Project "Human Capital and Mobility Programme", under contract n.ERBCHRXCT930413.

- "III Congresso Nazionale della SIMAI", Salice Terme, Italy, May 27-31, 1996 (attended only on May 27 and 28; communication presented by a coauthor, M.A. Cimaschi).

- Promoter and Organizer (with S. Venakides) of the international conference "Recent Advances in Partial Differential Equations and Applications", on the 70th birthday of Peter D. Lax and Louis Nirenberg, Ateneo Veneto, Venice, Italy, June 10-14, 1996.

- 8th International Biennial Conference on Physics of Estuaries and Coastal Seas (PECS), September 9-11, 1996, The Hague, The Netherlands.

- Advanced Mathematical Tools in Metrology III, September 25-28, 1996, Berlin, Germany.

- "PACE Workshop Topic 4 (rhythmic features)" (EC Project PACE MaST-3), October 6-8, 1996, Utrecht, The Netherlands (presented a Progress Report).

- "ITLA 97", II Italian-Latinamerican Conference on Applied and Industrial Mathematics, January 27-31, 1997, Rome, Italy (<u>invited</u> <u>speaker</u>).

- PACE - MAST3 Workshop, October 15-19, 1997, Gran Canaria, Canary Islands, Spain.

- <u>Invited Seminar</u> (Numerical Analysis and Applied Mathematics Seminar), University of Rome - "La Sapienza", November 27, 1997.

- PACE - MAST3 Overall Workshop, February 2-6, 1998, Middlesex University, Enfield (London), United Kingdom.

- <u>Invited</u> to a Round Table Discussion on Mathematical Sciences, UNESCO Venice Office, Venice, Italy, March 9, 1998.

- "Convegno Nazionale di Analisi Numerica", Montecatini Terme, Italy, April 15-17, 1998 (only the first day).

- Member of the Organizing Committee and of the Scientific Committee of: "Models and Numerical Methods in Transport Theory and in Mathematical Physics", an International Conference dedicated to Vinicio Boffi on his 70th birthday, April 16-17, 1998, Rome, Italy.

- "IV Congresso Nazionale SIMAI", June 1-5, 1998, Giardini Naxos (communication).

- Promoter and Organizer of the international conference "Venice-2/Symposium on Applied and Industrial Mathematics", June 11-16, 1998, Ateneo Veneto, Venice, Italy.

- "SIAM Annual Meeting", July 13-17, 1998, Toronto, Canada (communication).

- PACE and SAFE - MAST3 Final Meeting, March 9-12, 1999, Istituto Veneto di Scienze, Lettere e Arti, Venice, Italy (communication).

- Scientific-organizational meeting of GNFM/CNR, with round tables and scientific communications, Montecatini Terme, Italy, March 29-30 1999.

- Special day on "Metodi Numerici per la Finanza", University "Ca' Foscari", Venice, May 7, 1999.

- "1999 SIAM Annual Meeting", May 12-15, 1999, Atlanta, GA, U.S.A.

- <u>Invited Conference</u> at the meeting "La matematica nelle scienze della vita e nelle applicazioni", dedicated to Antonio Pignedoli, on the decennial of his death, Bologna, Italy, June 1-2, 1999.

- "XVI Congresso dell'UMI", Naples, Italy, September 13-18, 1999.

- National Conference on "Metodologie Numeriche per il Calcolo Scientifico", February 14 - 16, 2001, Turin (participation).

- "2001 SIAM Annual Meeting", July 9-13, 2001, San Diego, CA, U.S.A. (poster).

- "ENUMATH 2001" (IV ENUMATH Conference), Ischia Porto (Italy), July 23-28, 2001 (organized a minisymposium <u>and</u> given a communication therein).

- <u>Invited conference</u> for the Master in "Scientific Communication and Journalism", at the University of Padua, Padova, Italy, September 15, 2001.

- 6 Lectures for the Master in "Scientific Communication and Journalism", University of Padova, March 7, March 14, and May 9, 2003.

- Convegno Nazionale "Metodi e Modelli Matematici nello Studio dei Fenomeni Biologici", September 17-20, 2001, Rome, Italy [attended only on September 18].

- Venice Summer School on "Polarization Mode Dispersion", June 24-26, 2002, Venice, Italy (participation).

- "2002 SIAM 50th Anniversary and Annual Meeting", July 8-12, 2002, Philadelphia, PA, U.S.A. (presented a poster).

- <u>Invited Seminar</u> at the Department of Mathematics "Giovanni Sansone", University of Florence, Florence (Italy), October 16, 2002.

- Scientific Meeting of the GNFM, February 17-19, 2003, Montecatini Terme.

- <u>Invited Seminar</u> at the "Dipartimento of Informatica, Sistemi e Produzione", University of Rome - Tor Vergata, Rome, May 14, 2003.

- "Comunicazione scientifica ed editoria elettronica: la parola agli Autori", May 20, 2003, University of Milan, Milan (<u>invited</u> <u>speaker</u>).

- "Magenes days", a Two-Day Colloquium in Honour of Enrico Magenes on His $80th$ Birthday, June 18-19, 2003, Pavia, Italy.

- Scientific visit to the Courant Institute of Mathematical Sciences, New York University, New York, NY, USA, July 7-29, 2003.

- <u>Invited Seminar</u>, IMPA, Rio de Janeiro, Brazil, September 3, 2003.

- <u>Invited Speaker</u> at the "XXVI National Congress of Applied and Computational Mathematics (CNMAC)" of SBMAC (Sociedade Brasileira de Matemática Aplicada e Computacional), Minisymposium on Dynamics and Control [September 8-11, 2003], São José do Rio Preto, São Paulo, Brazil, September 10, 2003.

- TCN–CAE 2003, International Conference on CAE and Computational Technologies for Industry, Forte Village (Cagliari), October 2-5, 2003 (communication in sect. B, reserved to SIMAI).

- MC^2QMC 2004, International Conference on "Monte Carlo and Quasi-Monte Carlo Methods, and Probabilistic Methods for Partial Differential Equations", June 7-10, 2004, Juan-Les-Pins, Côte d'Azur, France [participation, and talk given by a coauthor].

- "SIMAI 2004", Congress of SIMAI, September 20-24, 2004, Island of San Servolo, Venice, Italy [President of the local Organizing Committee; presented a communication, and another by a coauthor].

- International IMACS/ISGG Workshop MASCOT04 - 4th Meeting on Applied Scientific Computing and Tools – Grid Generation, Approximation and Visualization, November 25-27, 2004, Florence, Italy (<u>invited lecture</u>).

- International Symposium on Variational Methods and Nonlinear Differential Equations, on the occasion of Antonio Ambrosetti's 60th Birthday, January 10-14, 2005, Rome, Italy [only for two days].

- <u>Invited Seminar</u>, within the workin group on "Numerical Differential Modeling", Department of Mathematics, University of Rome - "La Sapienza", Rome, Italy, February 15, 2005.

- Third annual meeting of the HYKE network, "Around HYperbolic and Kinetic Equations 3", "A-HYKE-3", 13-15 April 2005, CNR & University of Rome - "La Sapienza", Rome, Italy (participation).

- <u>Invited Seminar</u> at Department of Mathematics, University of Turin, Turin, Italy, May 6, 2005.

- <u>Invited Seminar</u> at Departamento de Autómatica, Escuela Politécnica, Universidad de Alcalà, Alcalà de Henares (Madrid), Spain, June 1, 2005.

- <u>Invited Talk</u> at the international conference "Open Culture. Accessing and sharing Knowledge", University of Milan, June 27-29, 2005, Milan, Italy [June 27, 2005].

- "SIAM 2005", SIAM Annual Meeting, July 11-15, 2005, New Orleans, LA, USA (participation).

- "ISAAC 2005" [5th International ISAAC Congress], Congress of the "International Society for Analysis, its Applications, and Computation", July 25-30, 2005, Catania, Italy (<u>invited talk</u>).

- Participation to CIME Summer Course on "Stochastic Partial Differential Equations in hydrodynamics: recent progress and prospects", August 29-September 3, 2005, Cetraro (Cosenza, Italy).

- Scientific Meeting of the GNFM, Montecatini Terme, April 6-8, 2006.

- SIAM Annual Meeting, July 10-14, 2006, Boston, MA (poster, with J.A. Acebrón).

- Organized a one-day meeting at the Istituto per le Applicazioni del Calcolo "M. Picone", "La SIMAI incontra i Consorzi di Supercalcolo: quali le prospettive di collaborazione?" ["SIMAI meets the Consortia for Supercomputing: which perspectives for a collaboration?"], introduced the subject and made a proposal, December 15, 2006, I.A.C., Rome, Italy.

- <u>Invited Seminar</u> at the Department d'Enginyeria Informatica i Mathematiques, Universitat Rovira i Virgili, Tarragona (Spain), 23 January, 2007.

- <u>Invited Seminar</u> at the Department of Mathematics, University of Turin, Turin, Italy, May 11, 2007.

- Visited the "Universitat Rovira i Virgili", Tarragona, Spain, supported by a Fellowship from Catalunya, for a collaborative research, July 2007.

- "Euro–Par 2007", The 13th International Euro-Par Conference, European Conference on Parallel and Distributed Computing, August 28-31, 2007, IRISA, Rennes, France (attended, <u>and</u> communication presented by a coauthor).

- "Italy *MATHEMATICA* Conference 2007", November 21, 2007, Rome, Italy [co-organizer; given a short welcome address].

- <u>Invited Talk</u>, Joint Mathematics Meetings, AMS-SIAM Special Session on 'Asymptotic Methods in Analysis with Applications', January 6-9, 2008, San Diego, CA.

- "Gene Golub day in Pisa", February 29, 2008, Pisa, Italy.

- Conference for the X Anniversary of the INFN Section at "Roma Tre", April 7, 2008, Rome, Italy.

- Invited Communication, at the Conference "La biblioteca scientifica e tecnologica" ["The scientific and technological library"], April 17, 2008, Rome, Italy.

- Invited Talk, ECMI 2008, June 30-July 4, 2008, London, U.K. [minisymposium in "Asymptotic Analysis and Applications"].

- One-hour invited talk at "WCNA 2008", The Fifth World Congress of Nonlinear Analysts, Orlando, Florida, July 2-9, 2008 [unable to attend].

- "SIMAI 2008", Congress of SIMAI ('in cooperation with SIAM'), September 15-19, 2008, Rome, Italy (Member of the Scientific Committee and of the Organizing Committee).

- "Euromech Colloquium 503: Nonlinear Normal Modes, Dimension Reduction and Localization in Vibrating Systems", September 27-October 2, 2009, Frascati (Rome), Italy (contributed paper with F. Bosi and D. Dessi, presented by D. Dessi).

- "Recent Trends in Nonlinear Partial Differential Equations" (a tribute to Guido Stampacchia on 30th anniversary of his death), November 6, 2008, Rome, Italy.

- "*Mathematica* Italia" User Group Meeting, November 26-28, 2008, Rome, Italy (member of the Scientific Committee; attended only November 26, 2008)

- Participation to the presentation of the periodical "Matematica & Impresa", Rome, Italy, December 18, 2008.

- Invited Seminar, CEMAT (Center for Mathematics and its Applications), Instituto Superior Técnico, Lisbon, Portugal, February 4, 2009.

- Invited to participate in the 'ESF preparatory meeting', entitled "Towards a european virtual library in Mathematics", March 13-14, 2009, Santiago de Compostela (Spain).

- 45′ Invited Lecture at the international symposium "NPDE 2009" – Nonlinear PDE and Applications, dedicated to Francesco Nicolosi on his 70th Birthday, June 22-25, 2009, Catania, Italy, on June 25, 2009.

- "ICNSP 09", 21st International Conference on Numerical Simulation of Plasmas, Lisbon, Portugal, October 6-9, 2009 (contributed paper presented by a coauthor).

- Conference "Renato Caccioppoli e l'analisi nonlineare", Accademia Nazionale dei Lincei, Rome, November 18, 2009.

- <u>Invited Talk</u> at the "I Jaen Conference on Approximation Theory, Computer Aided Geometric Design, Numerical Methods and Applications", Úbeda (Jaén), Spain, July 4th-9th, 2010, in the minisymposium on Asymptotic Analysis.

- Contributed talk at the "*Mathematica* Italia 4° User Group Meeting - Ricerca, Didattica, Applicazioni", Milan, October 7-8, 2010.

- <u>Invited contributed talk</u> at the "International Conference on Special Functions in the 21st Century: Theory and Applications", April 6 - 8, 2011, Washington, DC, dedicated to Frank Olver.

- Scientific inaugural meeting, Project "Plasmas in Astrophyics and in the Laboratories", Rome, CNR Headquarters, May 18, 2011 (participation).

- "Landscape and horizons in Peer Review. The European Peer Review Guide: Recommendations and actions", CNR, aula Marconi, Rome, 14 September 2011 (participation).

- <u>Invited</u> to the Conference of Rectors of Italian and Russian Universities "Russia and Italy: the role of Universities in developing cooperation", State Institute for International Relations (MGIMO), Moscow, Russia, September 26-27, 2011 (unable to attend).

- PAL2 Workshop – Modelling Instabilities in Hig-Energy Plasmas, November 23-24, 2011, Turin, Italy (participation).

- <u>Invited</u> <u>Plenary Speaker</u>, International Conference on Numerical Analysis & Optimization: Theory and Applications (NAOTA), King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, December 18-19, 2011.

- "MathProSpeM2012 - Mathematical Models and Analytical Problems in Special Materials", April 16-20, 2012, Rome, Italy; with a Special Session on the occasion of the 70th Birthday of Prof. Mauro Fabrizio, April 18, 2012 (participation only on April 17 and 18).

- "CARLO PUCCI', tra scienza e impegno civile", convegno di studi a dieci anni dalla scomparsa, Florence, Italy, May 24, 2013 (partecipation).

- "Mathematical Models and Methods for the Planet Earth", Istituto Nazionale di Alta Matematica (INdAM), Rome, Italy, May 27-29, 2013 (participation).

- "2013 SIAM Annual Meeting", July 8-12, 2013, San Diego, CA, U.S.A., <u>contributed</u> <u>paper</u> in the minisymposium MS 119, 'Special Functions: Applications and Numerical Aspects'.

- "XXXVIII Summer School on Mathematical Physics", Ravello, Italy, September 16-28, 2013. (Invited Speaker, for 6 lectures, September 16-21).

- Invited conference at the national meeting of "Matematica & Realtà", October 18-20, 2013, Salerno, Italy (with the sponsorship of SIMAI).

- "Fractional Calculus, Probability and Non-local Operators: Applications and Recent Developments", a workshop on the occasion of the retirement of Francesco Mainardi, Bilbao, Basque Country, Spain, 6-8 November, 2013 (contributed paper).

- Convegno "I Modelli Matematici. Strumenti di conoscenza e di innovazione tecnologica", Accademia Nazionale dei Lincei, Roma, 11-12 Dicembre 2013.

- Conferenza "La Roadmap Europea per l'energia da Fusione", di Francesco Romanelli, Accademia Nazionale dei Lincei, Roma, 13 Dicembre 2013.

- Invited talk in memory of Peter Laurence, delivered at the one day conference "Remembering Peter Laurence and his Mathematics", January 10, 2014, Rome, Italy.

- Invited presentation on the work of an applied mathematician, Rotary Club RomaEst, February 3, 2014, Rome, Italy.

- "PM-AM 2014", The 2014 International Conference on Pure Mathematics – Applied Mathematics, Venice, Italy, March 15-17, 2014 (invited contributed paper).

- Invited to the Round Table, for the orientation of the choice of studies related to aeronautics, within the project AIRVET, on new frontiers of formation to access to cariers aeronautics, Bookstore AsSaggi, Rome, Italy, April 14, 2014.

- Scientific meeting of the GNFM, Montecatini, May 15-17, 2014.

- "2014 SIAM Annual Meeting", July 7-11, 2014, Chicago, IL, USA (participation).

- SNC 2014, Symbolic-Numeric Computation, East China Normal University, 28-31 July, 2014, Shanghai, China (accepted contributed paper).

- DFDE 2014, "The Seventh International Conference on Differential Equations", August 22-29, 2014, Moscow, Russia (contributed paper, presented by a coauthor).

- XXXIX Ravello Summer School, Ravello, September 15-19, 2014. [Attended for one week]

- "Complex Plasma Phenomena in the Laboratory and in the Universe", Accademia Nazionale dei Lincei, Rome, Italy, January 19-20, 2015 (participation).

- "Numerics for Nonlinear PDEs", at Roma Tre University, Rome, Italy, January 29-30, 2015 (participation, only on the morning of the 29th).

- "Frontiere", January 29-30, 2015, Accademia Nazionale dei Lincei, Rome, Italy, January 29-30, 2015 (participation, only on the afternoon of the 29th).

- Organized (with Roberto Garra) the one day "Workshop on Fractional Calculus and its Applications", March 11, 2015, at the Roma Tre University, Rome, Italy.

- "Meeting on plasma theory and mathematical models", ENEA, Frascati (Rome), March 31, 2015 (participation).

- "7th International Conference on Porous media & Annual Meeting of the International Society for Porous Media", May 18-21, 2015, Padova, Italy (Poster, presented by coauthors).

- "ISOPE – 2015", Symposium COASTAL ENGINEERING , Kona, Big Island, Hawaii, USA, June 21-26, 2015 (contributed paper presented by some Collegue).

- Invited conference, within the 2015 UMI (Italian Mathematical Union) XX Congress, Siena, Italy, September 7-12, 2015 [30' talk].

- Scientific meeting of the GNFM-INdAM, Montecatini Terme, October 22-24, 2015 (participation).

- Rome – NOLASC '15, 14th International Conference on Non-Linear Analysis, Non-Linear Systems and Chaos [a WSEAS conference], November 7-9, 2015, Rome, Italy (invited contributed paper).

- Invited Seminar at "Seminari Formulas", Department of Architecture, Roma Tre University, April 13, 2016.

- Invited visit at BCAM, Bilbao - Basque Center for Applied Mathematics, Bilbao, Spain, May 25-28, 2016.

- Invited Speaker at the M2OP 2016 Congress, "Fourth International Congress on Multiphysics, Multiscale, and Optimization Problems", May 26-27, 2016, at BCAM - Basque Center for Applied Mathematics, Bilbao, Spain.

- Member of the Scientific Committee of *Computational Applied Mathematics*, for the "ECCOMAS Congress 2016" (7th European Congress on Computational Methods in Applied Sciences and Engineering), Crete, Greece, June 5-10, 2016 (unable to attend).

- ISOPE-2016 Rhodes (Rodos), Greece, June 26-July 1, 2016 (contributed paper, presented by a coauthor).

- SIAM Annual Meeting 2016, July 11-15, 2016, Boston, MA, USA (attended).

- Contributed paper at the Conference "ECSA 56 Coastal systems in transition: From a 'natural' to an anthropogenically-modified' state", Bremen, Germany, September 4-7, 2016 (presented by a coauthor).

- SIMAI 2016, September 13-16, 2016, Milan, Italy (co-organized a minisymposium, and presented a contributed paper).

- "Recent Developments in Probability Theory and Stochastic Processes", a conference in honor of Enzo Orsingher on the occasion of his 70th birthday, September 23, 2016, Rome, Italy (participation).

- Invited to a round table, at the meeting "Investing", Rome, September 30, 2016.

- Conference "EADTU [European Association for Distance Teaching Universities], 10 years of UNINETTUNO", Rome, Italy, October 19-21, 2016 (attended only on October 19, 2016).

- Invited plenary speaker to The 2016 International Conference Applied Mathematics, Computational Science and Systems Engineering (AMCSE 2016; www.amcse.org), Rome, Italy, November 5-7, 2016.
  $[http://www.amcse.org/plenary-speakers.html]$

- Invited speaker at the 4th Workshop on Fractional Calculus, Probability and Non-Local Operators: Applications and Recent Developments [FCPNLO] 2016, BCAM, Bilbao (Spain), November 23-25, 2016.

- One day meeting encountering INdAM: The IGNITOR Project and High Energy Astrophysics, December 9, 2016, Rome.

- "Dynamics and hydrodynamic limits in statistical mechanics", A Conference in memory of Enza Orlandi, January 20-21, 2017, Rome, Italy (attended).

- Organized (with the Section of Mathematics of UTIU, Uninettuno University) the event "Fractional Calculus and its Applications, Workshop at Uninettuno - 50 Years from Caputo Derivative", January 27, 2017.

- Organized a "Workshop on Neural Networks", with the Research Group *NeuralNet*, Roma Tre University, Rome, May 19, 2017.

- Organized with the Mathematics Section of UTIU (UniNettuno University), the Workshop "Current and Rediscovered Scaling Laws: New Perspectives and Initiatives in Fusion Research", June 19, 2017, Rome, Italy.

- "Ocean '17 MTS/IEEE Aberdeen, 19th to 22nd June, 2017 (contributed paper presented by a coauthor).

- Invited speaker at a minisymposium, SIAM Annual Meeting 2017, Pittsburgh, PA, USA, July 10-14, 2017.

- Organized (with Roberto Garra) a workshop on "fractional Stefan problems", at the Department of di Mathematics and Physics, Roma Tre University, July 20, 2017.

- "AOGS 14th Annual Meeting", Asia Oceania Geosciences Society, 6-11 August 2017, Singapore (accepted an abstract for a contributed paper but no one was able to attend).

- Organized with the Mathematics Section of UTIU (UniNettuno University), the Workshop "National Symposium on Interdisciplinary and Science Based Research on Nuclear Fusion and High Energy Plasmas", honoring Arrigo Sestero, September 11, 2017, Rome, Italy.

- Short invited talk at the "National Symposium on Interdisciplinary and Science Based Research on Nuclear Fusion and High Energy Plasmas", in memory of Arrigo Sestero, September 11, 2017, Rome, Italy.

- Greetings from SIMAI to the "Giornata IAC 2017" [the "IAC 2017 Day", for the 90 years from the foundation of the Istituto for the Applications of Computing "Mauro Picone, October 18, 2017, Rome, Italy.

- Organized the Workshop "Giornata della FIMA – Federazione Italiana di Matematica Applicata" ["FIMA Day – Italian Federation of Applied Mathematics"], October 27, 2017, Rome, Italy.

- "Meeting on Fractional Derivatives: Fractional Calculus and its Applications", 15 Dicembre, 2017, Roma [participation].

- Invited Speaker to the event "Le Opportunità dell'Intelligenza Artificiale e le nuove sfide del sistema Italia", [The opportunity of Artifcial Intelligence and the new challenges of 'the system Italia' ", January 23, 2018, Rome, Italy, at the Aula dei Gruppi Parlamentari, Italian Parliament.

- Organized a Workshop (with C. Cesarano and B. Coppi) entitled "New Directions for Nuclear Fusion Research Envisioned at the International Level" (Recognized contributions by this field to space physics and high energy astrophysics), February 20, 2018, Rome, Italy.

- Invited to "DIDAMATICA 2018", Cesena, April 19-20, 2018, organized by AICA, as a speaker, to present FIMA, the Italian Federation of Applied Mathematics (in his capacity of its President) to AICA.

- Invited Seminar, University "Campus Bio-Medico" of Rome, Rome, Italy, April 26 2018.

- Invited Speaker in the INASE Conferences in Venice, Italy, April 28-30, 2018 (declined).

- Invited Speaker and in the Scientific Committee, at the Workshop "Modelling and Simulation", Engineering School – DEIM, Università degli Studi della Tuscia, Viterbo, Italy, May 14-15, 2018.

- Invited Speaker at the Conference "LA LAGUNA DELLE MERAVIGLIE – Quale futuro per il patrimonio storico diffuso di Venezia?" [The Lagoon of the Wonders – what future for the widespread historical heritage?], Venice, Italy, May 19, 2018.

- Organized the workshop "Plasma Physics and Applied Mathematics. The role of mathematics in the development of plasma physics", June 6, 2018, Rome.

- Participation in *and* President of the Organizing Committee of "SIMAI 2018", the XIV Biennal Conference of the Italian Society of Applied and Industrial Mathematics, July 2-6, 2018, Rome, Italy.

- SIAM Annual Meeting 2018, Portland, Oregon, USA, July 9-13, 2018 (contributed paper).

- Invited Speaker (opening address) to "eduIA – Educazione Intelligenza Artificiale" [Education Artificial Intelligence], Novembre 15, 2018, Rome, Italy.

- Nonlocal and Fractional Operators, *in honour of Renato Spigler*, April 12-13, 2019, Rome, Italy. (Contributed paper presented by a coauthor.)

- International conference "OCEANS 2019", Marseille-France, June 17-21, 2019 (contributed paper presented by a coauthor).

- 19th International Multidisciplinary Scientific Geoconference SGEM 2019, 09-12 December 2019, Vienna, Austria (paper presented by a coauthor).

- "In the centennial of Vito Volterra" (President of the Italian Society of Sciences 1919-1920". ["Nel Centenario di Vito Volterra, Presidente della Società Italina delle Scienze"], Rome, December 18, 2019.

- Organized with Dario Pacciarelli the *online* Workshop "FIMA Day – Italian Federation of Applied Mathematics" ["Giornata della FIMA – Federazione Italiana di Matematica Applicata"], entitled "Strumenti matematici per la protezione dell'ambiente, del territorio e dei beni culturali", December 11, 2020; sponsored and realized with the help of the International Telematic University UNINETTUNO.

- Invited as a main speaker in a session on Special Functions, at the conference "Functional Analysis, Approximation Theory and Numerical Analysis" (FAATNA20), Matera, Italy, July 7-10, 2022; *unable to attend.*

List of Publications

1. "Accessibility to the lower hybrid resonance" (with G. Artico), *Lett. Nuovo Cimento* **10** (1974), 257-261.

2. "On the accessibility to the lower hybrid resonance" (with G. Artico), *Plasma Physics*, No. 11 **16** (1974), 1103-1106.

   [DOI: https://doi.org/10.1088/0032-1028/16/11/009]

3. "Sulle radici dell'equazione: $AJ_\nu(x) + BxJ'_\nu(x) = 0$", *Atti Sem. Mat. Fis. Univ. Modena* **24**(1975), 399-419 (in Italian).

4. "General accessibility criterion in multi-component plasmas and effects of impurities" (with G. Artico), *Nuclear Fusion - Letters* **16**, No. 3 (1976), 542-546.

   [DOI: https://doi.org/10.1088/0029-5515/16/3/024]

5. "Sulle radici dell'equazione: $AC_\nu(x) + BxC'_\nu(x) = 0$", *Atti Sem. Mat. Fis. Univ. Modena* **27** (1978), 153-166 (in Italian). [Also Errata Corrige, *Atti Sem. Mat. Fis. Univ. Modena* **28** (1979), 248.]

6. "Una generalizzazione del teorema di A.C. Dixon", *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **113** (1979), 263-268 (in Italian).

7. "La struttura delle relazioni 'molto maggiore' e 'molto minore' nel calcolo approssimato", *Rend. Sem. Mat. Univ. Padova* **63** (1980), 27-39 (in Italian).

8. "Alcuni risultati sugli zeri delle funzioni cilindriche e delle loro derivate", *Rend. Sem. Mat. Univ. Politec. Torino* **38** (1980), 67-85 (in Italian).

9. "An application of group theory to matrices and to ordinary differential equations", *Linear Algebra Appl.* **44** (1982), 143-151.

10. "An algorithm for the one-phase Stefan problem" (with E. Di Benedetto), *Rend. Sem. Mat. Univ. Padova* **69** (1983), 109-134.

11. "The linear differential equation whose solutions are the products of solutions of two given differential equations", *J. Math. Anal. Appl.* **98** (1984), 130-147.

12. "Some remarks on zeros of cylinder functions" (with M.E. Muldoon), *SIAM J. Math. Anal.* **15** (1984), 1231-1233.

13. "On the monotonic variation of the zeros of ultraspherical polynomials with the parameter", *Canad. Math. Bull.* **27** (4) (1984), 472-477.

14. "A stochastic model for lower hybrid wave scattering by density fluctuations" (with W. Grossmann), *Phys. Fluids.* **28** (6) (1985), 1783-1790.

15. "Numerical simulation for stochastic differential equations", Proc. Internat. AMSE Conference on Modelling & Simulation, Storrs, Connecticut, U.S.A., July 1-3, 1985 (A.M.S.E., Tassin La Demi Lune, France, 1985), Vol. 1, pp. 129-140 (invited paper).

16. "Nonlinear parametric oscillations in certain stochastic systems: A random van der Pol oscillator", *J. Statist. Phys.* **41** (1985), 175-200.

17. "A stochastic model for nonlinear oscillators of Duffing type", *SIAM J. Appl. Math.* **45** (1985), 990-1005.

18. "Mean power reflection from a one-dimensional nonlinear random medium", *J. Math. Phys.* bf 27 (7) (1986), 1760-1771.

19. "On the numerical solution of a nonlinear stochastic Helmholtz equation with a multigrid preconditioner" (with K.E. Jordan and G.C. Papanicolaou), *Appl. Math. Comput.* **19** (1986), 145-157.

20. "Inequalities and numerical bounds for zeros of ultraspherical polynomials" (with S. Ahmed and M.E. Muldoon), *SIAM J. Math. Anal.* **17** (1986), 1000-1007.

21. "Monte Carlo-type simulation for solving stochastic ordinary differential equations", *Math. Comput. Simulation*, special issue on 'Stochastic Systems Modelling', **29** (1987), 243-251.

22. "Boundary-layer theory in the Kramers-Smoluchowski limit for the Fokker-Planck equation on a half-space", *Boll. Un. Mat. Ital.* (7) **1-B** (1987), 918-938.

23. "Numerical treatment of a boundary-value problem for a certain singular parabolic partial differential equation", *J. Comput. Phys.* **74** (1988), 233-243.

24. "Numerical simulation for certain stochastic ordinary differential equations", *J. Comput. Phys.* **74** (1988), 244-262.

25. "Numerical simulation for degenerate diffusions", *Appl. Numer. Math.* **6** (1989/90), 405-413. [A preliminary version appeared as a solicited paper in: Proc. of the XII IMACS Congress on Scientific Computation, Session on 'Stochastic Systems Modelling', Paris, July 18-22, 1988].

26. "A boundary-layer theory for the nonlinear Fokker-Planck equation on the half-pace", Boundary and interior layers - computational and asymptotic methods, Proc. 5th Int. Conf., BAIL-V (Shanghai/China, 1988), 326-331, Boole Press Conf. Ser. 12, Boole, Dún Laoghaire 1988.

27. "The Huber polygonal method for the Stefan problem with the specification of energy" (with C. Sartori), *Z. angew. Math. Mech.* (ZAMM) **69** (1989) 12, 447-456.

28. "Wave propagation in one-dimensional inhomogeneous random media with an application to lower hybrid waves in fusion plasmas" (with W. Grossmann), *Phys. Fluids* **B-2** (7) (1990), 1535-1544.

29. "Approximating zeros of solutions of second-order linear ODEs by 'phase function' methods" (with M. Vianello), in 'Asymptotic and Computational Analysis': Conference in Honor of Frank W.J. Olver's 65th Birthday, Lecture Notes in Pure and Applied Mathematics, vol. 124, ed. by R. Wong, Marcel Dekker, New York and Basel, 1990, 707-722.

30. "A numerical method for evaluating zeros of solutions of second-order linear differential equations" (with M. Vianello), *Math. Comp.* **55** (1990), 591-612.

31. "Numerical solution for the one-phase Stefan problem by piecewise-constant approximation of the interface" (with F. Sartoretto), *Computing* **45** (1990), 235-249.

32. "Applied and Industrial Mathematics. Venice-1, 1989" (book), Editor, Mathematics and Its Applications: West Series, vol. **56**, Kluwer, Dordrecht, 1991, 374+xiii pp.

33. "Global existence and uniqueness for the Kummer transformation problem subject to non-Cauchy data" (with M. Vianello), *Differential Integral Equations* **4** (1991), 991-1003.

34. "Improved estimates for the derivatives of the O-symbols in view of numerical applications" (with M. Vianello), *J. Math. Anal. Appl.* **164** (1992), 480-488.

35. "Liouville-Green approximations for a class of linear oscillatory difference equations of the second order" (with M. Vianello), *J. Comput. Appl. Math.* **41** (1992), 105-116.

36. "WKBJ-type approximation for finite moments perturbations of the differential equation $y'' = 0$ and the analogous difference equation" (with M. Vianello), *J. Math. Anal. Appl.* **169** (1992), 437-452.

37. "A-stability of Runge-Kutta methods for systems with additive noise" (with D.B. Hernandez), *BIT* **32**:4 (1992), 620-633.

38. "Reaction-diffusion models from the Fokker-Planck formulation of chemical processes" (with D.H. Zanette), *IMA J. Appl. Math.* **49** (1992), 217-229.

39. "Nonlinear stability of incoherence and collective synchronization in a population of coupled oscillators" (<u>with</u> <u>L.L. Bonilla</u> <u>and</u> <u>J.C. Neu</u>), *J. Statist. Phys.* **67** (1992), 313-330.

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