

## CURRICULUM VITAE of ALFIO QUARTERONI



- Professor Emeritus, Ecole Polytechnique Fédérale de Lausanne, EPFL [2017 – present]
- Professor Emeritus, Politecnico di Milano [2022 – present]
- Senior Research Fellow, Oden Institute, University of Texas at Austin [2025 – present]
- Presidente, Fondazione Comunitaria Provincia di Lodi [2024 – present]

### Previous Positions

- Professor of Numerical Analysis at Politecnico di Milano [1989 –2022]
- Founder and Director of MOX (Laboratory of Modeling and Scientific Computing) Politecnico di Milano <https://mox.polimi.it/> [2002 –2022]
- Professor of Mathematics and Director of the Chair of *Modelling and Scientific Computing* at the Ecole Polytechnique Fédérale de Lausanne, EPFL [July 1998 – December 2017] <http://cmcs.epfl.ch/>
- Full Professor of Mathematics, University of Minnesota at Minneapolis [1990 - 1992]
- Full Professor of Numerical Analysis, Catholic University of Brescia, and Chairman of the Department of Mathematics [November 1986 – October 1989]
- Researcher at the Istituto di Analisi Numerica of the C.N.R. (Italian Research Council) of Pavia [April 1977 – October 1986]
- Research Fellow in Numerical Analysis at Université P&M Curie, Paris [1979 –1980]
- Military Service (Artillery Officer) [January 1976 – April 1977]
- Researcher at Montedison – Donegani Research Institute, Novara (Italy) [July 1975 – January 1976]
- Italian Laurea in Mathematics, University of Pavia (Italy) [November 1971 – June 1975]

### Member of the Following Academies

- Accademia Peloritana dei Pericolanti (since 2023)
- Italian Academy of Engineering and Technology (founding member, 2022)
- Academia das Ciencias de Lisboa (Lisbon Academy of Sciences) (foreign member since 2018)
- Academia Europaea Academy of Europe (since 2014)
- European Academy of Sciences (since 2010) - Head of Computation and Information Sciences Division (2014-2017)
- SATW (the Swiss Academy of Engineering Sciences) (expert since 2012)
- European Society of Computational Methods in Sciences and Engineering (honorary fellow since 2010)

- Accademia Nazionale dei Lincei, Roma (Italian National Academy of Sciences) (corresponding member since 2004 – full member since 2019)
  - Istituto Lombardo di Scienze e Lettere (Lombard Academy of Science) (since 1995)
- Member of the Fields Medal Committee for ICM 2020

#### **Awards (in Italy)**

- Recipient of the Galileian Chair, Scuola Normale Superiore, Pisa, Italy, 2001
- Premio Agrumello, 2003
- Dr. h.c. in Naval Engineering, University of Trieste, 2003
- Fanfullino d'oro della Riconoscenza 2006, Città di Lodi
- Premio Scientifico Capo D'Orlando, 2006, Museo Mineralogico Campano
- Premio Ghislieri alla carriera 2013 (Lifelong Ghislieri Prize 2013)
- Premio Rotary 2024 Adda Lodigiano
- Premio 2017 per l'Arte, Pro-LoCo Lodi, 22 September 2017
- Premio Pianeta Galileo, Tuscany Regional Council, 2019
- Second Prize, Science Book of the Year, Trieste Next Festival, for the book *L'Intelligenza Creata*, Hoepli, 2025.

#### **Awards (international)**

- NASA Group Achievement Award for the pioneering work in Computational Fluid Dynamics, 1992
- Galileo Galilei International Prize for Science 2015
- Feng Kang Prize 2013 of the Chinese Academy of Sciences
- Euler Medal 2021-2022 by ECCOMAS
- Lagrange Prize 2020-2023 by ICIAM
- Blaise Pascal Medal 2024 by the European Academy of Sciences
- Ritz-Galerkin Medal 2024 by ECCOMAS
- Ralph E. Kleinman Prize 2024-2025 by SIAM

#### **Best Paper Awards**

- SIAM Outstanding Paper Prize, 2004
- First Oden-Hughes Award for the best paper published in CMAME in 2022-2023
- Best deal.II-based paper award 2024.

#### **ERC Grants**

- Recipient of the ERC Advanced Grant « MATHCARD », 2008-2013
- Recipient of the ERC PoC (Proof of Concept) Award “From Math to Ward”, August 2012
- Recipient of the ERC PoC (Proof of Concept) Award “Math4AAARisk”, June 2015
- Recipient of the ERC Advanced Grant « i-HEART », 2017-2022

#### **Honors**

- Commander of the Order of Merit of the Republic of Italy (2024) (*Commendatore*)
- Member of the Scientific Committee of Human Technopole (since 2022)
- EAMBES Fellow (European Alliance for Medical and Biological Eng. & Science) (since 2020)
- Author of the entry “Matematica” of Enciclopedia Treccani:  
<http://www.treccani.it/magazine/atlanter/cultura/Matematica.html>
- Member of the IMU Circle (International Mathematical Union) (since 2014)
- Honorary member of ECMI (since 2014)
- Socio Fondatore UMI (Unione Matematica Italiana), since 2023
- Fellow of SIAM (since 2009 – first row)
- Member of SIAM Board of Trustees (2009-2013)
- Paul Harris Fellow, 2008

- Plenary Speaker at the International Congress of Mathematicians, Madrid 2006
- IACM (International Association of Computational Mechanics) Fellow Award, 2004
- Laurea Honoris Causa in Naval Engineering, Università di Trieste, 10 October 2003
- Research consultant of the ICASE, NASA Langley Research Center, Hampton, VA (1984-88)
- Fellow of the Minnesota Supercomputer Institute, Minneapolis, Minnesota (1990-92)
- Former student of Collegio Ghislieri, Pavia (Italy) (1971 – 1975)

### **Publications : Statistics (October 2024)**

- Author of 25 books (19 published by Springer, 1 by Oxford University Press, 1 by Cambridge University Press, 2 by Zanichelli, 1 by Dedalo, 1 by Hoepli – some of them translated into several languages)
- Editor of 13 books (8 published by Springer, 1 by North-Holland Elsevier, 1 by the American Mathematical Society, 3 by De Gruyter)
- Author of more than 400 peer reviewed Journal papers and invited Conference papers
- Google Scholar: H=100, Citations: 66000  
<https://scholar.google.ch/citations?user=UiDIKcAAAAJ&hl=it&oi=ao>
- Scopus : H=66, Citations : 17200  
<https://www.scopus.com/authid/detail.uri?authorId=35618484900>

### **Leadership in Research**

- (First) Director of CADMOS (Center for Advanced Modeling Science), EPFL, Lausanne [2009-2014]; CADMOS is a center involving several tens of research laboratories from the Universities of Geneva (UNIGE) and Lausanne (UNIL) and from the EPFL to develop a long-term expertise in computational science, high performance computing and modeling of large and complex systems  
<http://www.cadmos.org/>
- Founder and First Director [2010-2016] of MATHICSE (Mathematical Institute of Computational Science and Engineering), EPFL, an Institute comprising 5 chaired laboratories with about 100 people <http://mathicse.epfl.ch/>
- Founder and First Director [2002-2013] of MOX, Politecnico di Milano (currently hosting 20 faculty members and about 50 young scientists) <https://mox.polimi.it/>
- Co-founder and President of MOXOFF SpA [2010 – present]
- Scientific Director at C.R.S.4 (Center for Advanced Research and Development in Sardinia) [1992 - 1998], an international research center headed by Carlo Rubbia, accounting about 80 researchers  
<http://www.crs4.it/>

### **Leadership in Industrial Innovation**

- Co-founder and president of MOXOFF SpA, a spinoff company of Politecnico di Milano for applied mathematics and numerical simulation [2010 -] <http://www.moxoff.com/en/>
- Co-founder and member of the BoD of MATHESIA SrL [2015-], a crowdsourcing company helping entrepreneurs and mathematicians to meet and find mathematical solutions to industrial and societal problems
- Co-founder and president of MATH&SPORT SrL [2016-], a company for analytical innovation and data analysis in sports for teams and athletes
- President of the Scientific Committee of Zucchetti Group [2023 – 2024]

### **Temporary Visiting Positions**

- Brin Mathematics Research Center, University of Maryland, College Park, visiting professor, March-May 2024
- Visiting professor at Dept. of Mechanical and Aerospace Engineering, Stanford University, April 2013

- Visiting professor at LJLL (Laboratoire Jacques-Louis Lions), Université de Paris 6, France, March 2013
- Visiting professor at Texas A&M University, College Station, February 2010
- Visiting scientist at the Institute of Mathematics and Applications of the University of Minnesota, 1986
- Associate Researcher of the French C.N.R.S. at the Laboratoire d'Analyse Numérique of the University of Paris VI, 1985
- Visiting Associate Professor at the School of Mathematics of the University of Minnesota, 1984
- Visiting Scientist at the Institute for Computer Applications in Science and Engineering (ICASE), NASA Langley Research Center, Hampton (Virginia), 1982
- Visiting Member at the Laboratoire d'Analyse Numérique of the University of Paris VI, 1979 - 1980
- Visiting Member at the Institute für Angewandte Mathematik, University of Bonn, Germany, 1978

#### **Selected Service Activities in Italy**

- Member of the "Committee for the Applications of Mathematics" of the Italian Research Council (C.N.R.) (1986-90)
- Member of the Scientific Board of SIMAI (Italian Society of Industrial and Applied Mathematics) (1996-98) and vice-president (1996-98)
- Member of the Scientific Committee of IMATI (former IAN), CNR, Pavia, Italy
- Chairman of the Evaluation Panel of Mathematics and Computer Science of CIVR, the Committee for Research Evaluation of the Italian Ministry of Research and University
- Member of the Scientific Committee of SCOPE, University of Naples (2009-2014)
- Member of the Advisory Board of the Doctoral School in Mathematics, University of Padova (2009-2012)
- Chairman of the Evaluation Panel of Mathematics and Computer Science of VQR 2004-2010 (Valutazione della Qualità della Ricerca) ANVUR, the National Agency for Research Evaluation of the Italian Ministry of Research and University, 2011-2013
- Member of the Scientific Committee of CEN (European Centre of Nanomedicine), Milan (2009-2015)
- Scientific Coordinator of SISSA MathLab, Trieste (Italy) (2010-2015)
- Member of the International Advisory Board of IUSS Institute of Advanced Studies, Pavia (2017-)
- Member of the International Advisory Board of IMT School for Advanced Studies, Lucca (2018-)
- Member of the "Commissione Europa" of the Accademia Nazionale dei Lincei (2020-)
- Member of the Advisory Board of CRS4 (2021-)
- Member of the Scientific Committee of Human Technopole (2022-)

#### **Selected Service Activities in Switzerland**

- Member of the Research Board of EPFL (Ecole Polytechnique Fédérale, Lausanne) (1998-2004)
- Member of the Advisory Board of the Centre Interfacultaire Bernoulli, EPFL, since its foundation
- Board for Academic Promotion (CPA) of EPFL (since 2001)
- Member of the Doctoral School Board of EPFL (2002-2006)
- Chairman of the Mathematics Recruiting Commission of the EPFL (2004-2009)
- Chairman of the Recruiting Commission of MATHICSE (Mathematics Institute for Computational Sciences and Engineering) of the EPFL (2010-2015)
- Chair of the Evaluation Committee of the Institute of Mathematics, University of Zurich, 2022

#### **Selected Service Activities: International**

- Vice-chairman of the Mathematics and Computer Science TMR (Training, Mobility and Research) evaluation panel of the E.U., 1997
- Member of the scientific committee of ICOSAHOM Conference Series (1989 -)
- Member of the scientific committee of DD (Domain Decomposition) Conference Series (1998-2018)

- Chairman of the Mathematics and Computer Science RTN (Research Training Network) evaluation panel of the E.U., 1999
- Chairman of the AMIF (Applied Mathematics for Industrial Flows) research programme of the ESF (European Science Foundation) (1996-2001)
- Member of the Scientific Committee of INRIA (Institut de Recherche en Informatique et Automatique) (France), (1999-2003)
- Member of the Scientific Advisory Committee of the Research Center “MATHEON: Mathematics for key Technologies”, TU Berlin (2003-2010)
- Member of the Scientific Steering Committee of the Oxford Centre for Nonlinear PDEs (since 2008)
- Member of the International Advisory Committee of CEMAT, IST Lisbon (since 2008)
- Member of the International Scientific and Technological Advising Committee of Laboratório Nacional de Computação Científica (LNCC), Rio de Janeiro, Brasil (since 2008)
- Member of the Advisory Board of the NSF Institute for the Life Sciences, Rice University, Houston University and the Texas Medical Center (since 2009)
- Chairman of the panel for the selection of invited speakers in Session 16 (Numerical Analysis and Scientific Computing) at ICM 2006 (International Congress of Mathematicians)
- Member of the SIAM Subcommittee on Journals (2009-)
- Member of the Research Review for Applied Mathematics of QUANU (Quality Assurance Netherland Universities), 2009
- Member of the Scientific Advisory Board of ACMAC (Archimedes Center for Modeling, Analysis and Computation), Crete (since 2010)
- Member of the Scientific Committee of FSMP (Fondation Sciences Mathématiques de Paris), (since 2010)
- Member of the SIAM Board of Trustees (2009-2012)
- Member of the SIAM Fellow Committee (2009-2011)
- Member of the Advisory Board of the Max-Planck-Institut für Mathematik (since 2011)
- Chairman of the Lagrange Prize Committee, ICIAM 2011
- Chairman of the Gauss Prize Committee, IMU 2014
- Member of the Scientific Advisory Board of Oberwolfach (since 2014)
- Member of the Scientific Committee of the Computational Science Division of European Academy of Sciences (since 2014)
- Member of the ERC StG Panel PE1 (Mathematics), year 2012
- Chairman of the ERC CoG Panel PE1 (Mathematics), years 2014, 2016, 2018
- Member of the Scientific Board of the Riemann International School of Mathematics (2016-)
- Chairman of the Scientific Program Committee of ICIAM 2019, Valencia
- Member of the Scientific Committee of Centro Internacional de Matemática (CIM), Portugal (2018-)
- Member of the Electoral Board of the Sedleian Chair, University of Oxford, 2018
- Member of the SIAM J. Von-Neumann Lecture 2019 Committee
- Member of the Evaluation Committee of the Institute of Applied and Computational Mathematics of the Foundation for Research & Technology Hellas (FORTH), 2022
- Chair of the Evaluation Committee of the Institute of Mathematics, University of Zurich, 2022
- Member of the IMU Committee for Fields Medal Selection 2019-22

#### **Editor in Chief of the Following Book Series**

- Book series « MS&A, Modeling, Simulation and Applications », Springer-Verlag. Founder and Editor in Chief (since 2009)
- Book series « Unitext », Springer-Verlag. Editor in Chief (since 2009)

#### **Associate Editor of the Following Book Series**

- Book series « Unitext », Springer-Verlag Italia, Milan, Editor (1998-2008)
- Book series « Scientific Computation », Springer-Verlag, New York, Editor (1998-)

### **Associate Editor of the Following Journals**

- S.I.A.M. Journal on Numerical Analysis (1991-1996, 2002-2007)
- MMAN (formerly R.A.I.R.O.) (1995-present)
- Mathematical Models and Methods in Applied Sciences (1992-present)
- Journal on Numerical Mathematics (formerly East-West Journal on Numerical Mathematics) (1993-present)
- Journal of Computational Mathematics, honorary editor (1994-present)
- Computing and Visualization in Science (1996-2006)
- JEMS (Journal of the European Mathematical Society) (1998-2010)
- MECCANICA (1998-2004)
- Journal of Mathematical Fluid Mechanics (1998-present)
- Applied Numerical Mathematics (1999-2018)
- Annali di Matematica Pura e Applicata (1999-present)
- PCFD (Progress in Computational Fluid Dynamics) (2000-present)
- CMAME (Computer Methods in Applied Mechanics and Engineering) (2001-present)
- Advances in Computational Mathematics (1992-95)
- S.I.A.M. Journal on Multiscale Modeling and Simulation (MMS) (2002-present)
- Numerische Mathematik (2004-present)
- Revista Matematica Complutense (2004-present)
- Networks and Heterogeneous Media, AIMS (2006-present)
- Portugaliae Mathematica (2008-2022)
- Environmental Semeiotics (2008-present)
- Communications in Applied Mathematics and Computational Science (CAMCoS) (2008-present)
- MathematicS In Action, SMAI, Paris (2008-present)
- Journal de Mathématiques Pures et Appliquées (2009-2025)
- Int. J. Num. Meth. Biomed. Engng. (IJNMBE) (2010-present)
- Numerical Algorithms (2009-present)
- Journal on Mathematics in Industry (2010-present)
- Journal of Computational Dynamics (2011-present)
- Vietnam Journal of Mathematics (VJM), (2011-present)
- In Silico Pharmacology, Springer (2012-2019)
- SMAI Journal of Computational Mathematics (2014-present)
- CSIAM Transaction on Applied Mathematics (CSAM) (2019-present)
- Computers in Biology and Medicine (2021-2024)

### **Research Fields**

- Mathematical Modelling, Numerical Analysis, Scientific Computing
- Theoretical Analysis: Numerical Approximation of Partial Differential Equations by Finite Elements, Finite Differences, Finite Volumes, Spectral Methods, Domain Decomposition Methods, Reduced Basis Methods, Isogeometric Analysis
- Applications to: fluid mechanics; aerospace engineering; yacht engineering; geophysics; acoustics, elastic, seismic and electromagnetic wave propagation phenomena; architectural landscape design by mathematical modeling; improvement of sports performance (America's cup sailing yachts, olympic rowing, swimsuits); sports and rehabilitation engineering
- Mathematical modeling for Medicine: Human Circulatory System, Heart Integration (electrophysiology, cellular ionic activity, mechanical contraction and relaxation, ventricular fluid dynamics, valve dynamics), assessment of risk for aneurysms, cerebrospinal fluid dynamics, optimization of prosthetic implants and surgical planning; epidemiological models.

### **Master Students, PhD Students, and Post-Doctors Supervised**

- Mentor and supervisor of 70 PhD students in mathematics (top 100 supervisors in Mathematics ever)

<https://genealogy.math.ndsu.nodak.edu/id.php?id=95586>,  
<https://genealogy.math.ndsu.nodak.edu/most-students.php?count=100>

- Mentor and supervisor of over 60 master students, and more than 100 post-docs.
- In the past fifteen years, many young researchers previously mentored by the PI have been appointed Professors or Researchers at: EPFL (Lausanne), Politecnico di Milano (Italy), Emory University (USA), SISSA (Italy), University of Coimbra (Portugal), University of Aachen (Germany), University College London (UK), Université de Grenoble (France), Université de Franche-Comté (France), Université Paris 13 (France), University of Houston (USA), University of Texas Austin (USA), TU Delft (NL), Loughborough University (UK), University of Oxford (UK), University of Sheffield (UK), Duke University (USA). Many others are now chief scientists in R&D divisions of Banks, Insurances, Industries, Formula One racing teams, in several Countries. Two former PhD students, A. Manzoni in 2012 and F. Negri in 2015, have won the prestigious ECCOMAS PhD Award for the best European PhD thesis on computational methods in applied sciences and engineering. My PhD student F. Regazzoni has received the Young Investigator Presentation Award from VPH2020 and he is Co-PI of an ERC Grant.

### **Selected Research Grants and Contracts (since 1998)**

- Principal investigator, Swiss National Science Foundation, Project Nr. 21-54139.98 on "Domain decomposition and adaptive methods: analysis, development and applications", October 1998 - September 2000
- Co-principal investigator, Swiss National Science Foundation, Project Nr. 21-57119.99 on Bubble-stabilized Spectral Element Methods for Viscoelastic Flows", October 1999 - September 2001
- Principal investigator of a research project "Multiscale Methods in Biofluidmechanics", Politecnico di Milano, October 1999 - September 2001
- Cofin 1999 (MIUR, Italian Ministry for University, Education and Research) : « Approximation of non-coercive problems with applications to solid mechanics and electromagnetism »
- Principal investigator, Brite/Euram (OFES N. 97.0427-1) « IDEMAS : Industrial Demonstration of Accurate and Efficient Multidimensional Upwind and Multigrid Algorithms for Aerodynamic Simulation on Unstructured Grids ». Project Coordinator : Prof. H. Deconink, Von Karman Institute, Belgium. Main industrial partners: Dassault Aviation, ALENIA, DASA. (June 1999 - November 2000)
- Cofin 2000 (MIUR, Italian Ministry for University, Education and Research) : « Methods and Multiscale modelling for transfer and propagation problems »
- Principal investigator, Swiss National Science Foundation, Project Nr.21-59230.99 on "Mathematical modelling and numerical simulation of fluid flow and mass transport processes in heterogeneous media ", October 2000 - September 2003
- Principal investigator, Swiss National Science Foundation, Project Nr. 20-61862.00 on "Multimodels and multidomain methods for fluid-structure interaction problems", April 2001 - March 2003
- Cofin 2001 (MIUR, Italian Ministry for University, Education and Research) : « Numerical Methods in Fluid Dynamics and Electromagnetism »
- National Project Coordinator : Agenzia 2000-CNR (Italian National Council for Research), « Modelling fluid-structure interaction in the arterial system ». (CNRC00A3F1).
- Alinghi (Swiss Challenge for America's Cup 2003) - EPFL Scientific Partnership (2001-2003)
- Principal investigator, Swiss National Science Foundation, Project Nr. 20-65110.01 on "Accurate Solution of Navier-Stokes equations in moving domain and with non-standard boundary conditions", February 2002 - January 2004
- Principal investigator, Swiss National Science Foundation, Project Nr. 20-100637 on "Multiscale Models for blood flow", April 2003 - May 2004
- Project Coordinator. HaeMOdel, European Union Research Training Network on Mathematical Modelling for Haemodynamics. Partners : Politecnico di Milano, Ecole Polytechnique Fédérale de Lausanne, Imperial College, London, Technical University Graz, INRIA and University Paris VI, Instituto Superior Tecnico Lisbon. October 2002 - September 2006

- CTI (Swiss Commission for Technology and Innovation) - Debiotech SA (and Insel Hospital, Bern), Chronodial Project, January 2003 - December 2004, Principal Investigator
- Cofin 2003 (MIUR, Italian Ministry for University, Education and Research): « Numerical Modelling for Scientific Computing and Advanced Applications », Principal Investigator
- INDAM (Istituto Nazionale di Alta Matematica), Project: « Numerical Modelling for Scientific Computing and Advanced Applications », May 2003 - April 2004
- Principal investigator, Swiss National Science Foundation, Project Nr. 200020-101800 on "Mathematical modelling and numerical simulation of fluid flow and mass transport processes in heterogeneous media", November 2003 - September 2005
- CTI (Swiss Commission for Technology and Innovation) - Alinghi (Swiss Challenge for America's Cup 2003 – Defender of America's Cup 2007) - EPFL Scientific Partnership. (2001 -2007), Co-principal investigator
- Solar Impulse (Bertrand Piccard's Round-the-World Flight in a Solar Aircraft) - EPFL Scientific Partnership. Icare Project. (2004-2007), Co-principal investigator
- SRE, Sport and Rehabilitation Engineering, EPFL Project (2004-2007), Co-principal investigator
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-103809 on "Finite element methods for Navier-Stokes equations with free-surface", May 2004 - April 2006
- Co-principal investigator, Swiss National Science Foundation, Project Nr. 200020-109602 on "Continuous/discontinuous finite element approximation of differential problems with multiple scales in heterogeneous media", October 2005 - September 2006
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-109378 on "Interface operators for fluid-structure interaction algorithms and applications", November 2005 - October 2007
- Principal investigator, Swiss National Science Foundation, Project Nr. 200020-112166 on "Finite element methods for Navier-Stokes equations with free-surface", May 2006 - October 2007
- Principal investigator, Swiss National Science Foundation, Project Nr. 200020-113304 on "Continuous/discontinuous finite element approximation of differential problems with multiple scales in heterogeneous media", October 2006 – September 2008
- Principal investigator, Swiss National Science Foundation, Project Nr. 200020-117587 on "Interface operators and solution algorithms for fluid-structure interaction problems with applications", January 2008 – December 2010
- Co-principal investigator, Synergia, Swiss National Science Foundation, Project Nr. CRSII2-125444/1, "Fluid dynamics and mixing behaviour in orbitally shaken bioreactors for mammalian cell cultivation", April 2009 – March 2012
- Alinghi project for the 33<sup>rd</sup> America's Cup, 2009-2010
- Principal investigator, HP2C High Performance and High Productivity Computing, HPC for Cardiovascular System Symulation, 2010-2012
- Principal investigator, FP7 ICT Project, Grant 224635, VPH2 – Virtual Pathological Heart of the Virtual Physiological Human, 2008-2011
- Principal investigator at the Politecnico di Milano of more than 50 research contracts funded by private companies on a broad variety of problems ranging from oil exploration, optimization of industrial processes, simulation of optical devices, nanomaterials, drug delivery, optimization of yacht and rowing hull performances, etc.
- Modeling and simulation of the human cardiovascular system with application to the diagnosis, treatment and surgical planning of cardiovascular diseases, Swiss-Brazilian Joint Project, September 2010 - August 2012
- Holder of an ERC Advanced Grant on Project "MATHCARD", 2009-2014
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-122136/1 « Reduced basis methods for the optimization of complex systems» January 2009- December 2011.
- CADMOS - Center for Advanced Modeling Science - cooperation between the University of Geneva, the University of Lausanne and EPFL.
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-135444 "Numerical simulation of a sailing boat: dynamics and shape optimization" April 2011- March 2013
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-141034/1 "Model reduction strategies for control, optimization and uncertainty quantification of parametrized systems », May 2012-2015

- Principal investigator, Swiss National Science Foundation, Project Nr. 200021E-140184/1 “Domain decomposition based fluid structure interaction algorithms for highly nonlinear and anisotropic elastic arterial wall models in 3D for the prediction of transmural stress distributions” October 2012- October 2015
- Principal investigator, Swiss National Science Foundation, Project Nr. 200021-147133 “Isogeometric analysis for partial differential equations: surface models and optimization problems in haemodynamics” May 2013- May 2016
- Holder of the ERC PoC (Proof of Concept) Award “From Math to Ward”, 2012-2013
- Co-Principal investigator, PASC 2014
- Holder of the ERC PoC (Proof of Concept) Award “Math4AAARisk”, 2015-2016
- Holder of the ERC Advanced Grant “iHEART”, 2017-2022 (2.351 MEuros)
- Principal Investigator of the PRIN Project "Modeling the heart across the scales: from cardiac cells to the whole organ", 2019-2022
- Principal Investigator of the Project "Un modello epidemiologico per analisi di scenario per l'epidemia COVID-19 in Italia", 2021-22, with DipoFAM – Presidenza del Consiglio dei Ministri, the Italian Government
- Principal Investigator of the FISIR-2020 Project " Modellazione matematica degli effetti di COVID-19 sulla funzione cardiaca", 2021-22

### **Distinguished (and Named) Lectures**

- Fifth International Conference on Computing Methods in Applied Sciences and Engineering, Versailles (France), December 1981, plenary lecturer
- First Int. Symp. on Domain Decomposition Methods for PDEs, Paris (France), 9 January 1987, plenary lecturer
- 2nd Int. Symp. on Domain Decomposition Methods for PDEs, Los Angeles (California), 15 January 1988, plenary lecturer
- ECMI (European Conference on Mathematics in Industry), Glasgow, August 1988, plenary lecturer
- First European Congress of Mathematics, Paris, 10 July 1992, keynote lecturer
- ICFD, Oxford, 4th Conference on Numerical Methods for Fluid Dynamics, 4 April 1995, plenary lecturer
- 3rd Intern. Conf. on Industr. and Applied Math. (ICIAM), Hamburg, 3-7 July 1995, plenary lecturer
- Carnegie-Mellon University, Pittsburgh (PA), International Conference on Modern Computational and Applied Mathematics, 11-13 April 1996, keynote lecturer
- Université de Grenoble (France), IMAG-INRIA Colloquium, 21 January 1999
- INRIA Monthly Colloquium, INRIA Rocquencourt, France, 20 April, 1999
- Winterthur, Switzerland, 1 September 1999: Conference of the European Society of Education in Engineering, plenary lecturer
- University of Macau, China, 11-14 January 2000, Int. Conf. On Mathematics and its Role in Civilization, plenary lecturer
- University of Magdeburg (Germany), Int.Conf. on Hyperbolic Problems (HYP2000), 27 February - 2 March 2000, plenary lecturer
- University of Goettingen (Germany), Annual GAMM Conference (GAMM2000), 3-7 April 2000, plenary lecturer
- Mathematical Webs Int. Conf., University of Coimbra, Portugal, 18-20 October 2000, plenary lecturer
- Fourth ENUMATH International Conference on European Numerical Mathematics, Ischia, Italy, 23-28 July 2001, plenary lecturer
- Distinguished Series on High Performance Computing, Singapore-MIT Alliance, MIT, November 28, 2001
- Scuola Normale Superiore (Pisa, Italy), Galileian Chair, distinguished lectures, February 2002
- ICM 2002, Beijing, August 2002, invited lecturer (Section 17 : Applied Mathematics)
- JSIAM2002, 21 September 2002, Keio University, Japan, plenary lecturer
- A. K. Aziz Lecture 2003, University of Maryland, College Park, MD, 7 March 2003
- 16<sup>th</sup> International Conference on Domain Decomposition Methods, New York University, 12 January 2005, plenary lecturer

- International Mediterranean Congress of Mathematics, Almeria, Spagna, 6-10 June 2005, keynote lecturer
- Karlovitz Lectures 2005, Georgia Institute of Technology, Atlanta, USA, 20-21 October 2005
- ICM2006, International Congress of Mathematicians, Madrid, Spain, August 2006, plenary lecturer  
<http://www.mathunion.org/Videos/ICM2006/muster.php?quarteroni2006>
- Lagrange Lecture 2007, University of Turin, 7 May 2007
- International Euler Symposium, Basel, 31 May 2007, plenary lecturer
- SIAM Conference on Analysis of Partial Differential Equations, Phoenix (AZ), USA, 28 November 2007, plenary lecturer
- IMA, University of Minnesota, Minneapolis, 13 February 2008, Math matters public lecture
- Festival della Matematica, Rome, Auditorium della Musica, Lectio Magistralis, 16 March 2008
- WCCM8-ECCOMAS08, Venice, 30 June 2008, plenary speaker
- Santalo' Lecture 2008, Universidad Complutense de Madrid, 16 October 2008
- Alan Tayler Lecture 2008, University of Oxford, 25 November 2008
- Frontiers Lectures, Texas A&M University, College Station, 1-5 February, 2010
- The XXVth Courant Lecture 2010, 29<sup>th</sup> April 2010
- Colloquium on the 100<sup>th</sup> anniversary of the Real Sociedad Matematica Espanola, La Coruna, Spain, 9<sup>th</sup> May, 2011
- The R.Mitchell lecture 2011, 24<sup>th</sup> Biennial Conference on Numerical Analysis, University of Strathclyde, Glasgow, June 2011
- The Harold J. Gay Lecture, WPI (Worcester Polytechnic Institute), 13 April 2012  
<http://www.wpi.edu/academics/Depts/Math/News/lectureseries.html>
- The Feng Kang Lecture 2013, Chinese Academy of Sciences, Beijing, 7 May 2013  
<http://lsec.cc.ac.cn/fengkangprize/Fkdl-2013.htm>
- Colloquia Patavina, Mathematics Department, University of Padova, 25 March 2014
- The IMA Lighthill Lecture, BACM 2014, Cardiff University, 28 April 2014  
<http://mathsevents.cf.ac.uk/bamc2014/>
- EMS distinguished speaker 2014, FJIM 2014, Bilbao, June 30 – July 4, 2014  
<http://www.euro-math-soc.eu/node/1810>
- PACM Colloquium, Princeton University, 21 September 2015
- ECCOMAS 2016 plenary lecture, Crete, June 6-10, 2016
- CMBE17, Opening Lecture, Pittsburgh, 10 April 2017  
<http://www.compbioimed.net/2017/invited-speakers.htm>
- The Euler Lecture 2017 (Euler-Vorlesung 2017), Potsdam, 19 May 2017  
<http://www.euler-lecture.berlin/archiv.html>
- Distinguished PDE Lecture Series, Lecturer 2017, Vienna Center for PDEs, Vienna, 6 June 2017  
<http://viennapde.tuwien.ac.at/events/pdelectures.html>
- Colloquium, Institute of Mathematics Universitat de Barcelona, 18 October 2017
- Colloquium, Department of Mathematics, University of Maryland, 2 February 2018
- The Keith Stewartson Memorial Lecture, St Andrews, Scotland, 26 March 2018
- The Marker Lectures 2018, Penn State University, State College, October 2018  
<https://math.psu.edu/sites/default/files/section/MarkerBrochure%20AQ.pdf>
- The Pedro Nunes Lectures 2018, Lisbon, Coimbra and Porto, November 2018  
<http://www.cim.pt/agenda/event/196>
- LIFD Annual Lecture 2020, Leeds Institute of Fluid Dynamics, 10 February 2020
- The Sneddon Lecture 2021, The University of Glasgow, 4 May 2021
- 8ECM (European Congress of Mathematics), Opening Plenary Lecture, Portoroz, Slovenia, 21 June 2021
- The David Gottlieb Memorial Lecturship on Scientific Computing 2023, Brown University, April 3, 2023
- The Lagrange Lecture 2023, ICIAM2023 Conference, Tokyo, Japan, August 24, 2023
- The Piola Lecture 2024, University of Pavia, Italy, 1 October 2024
- Lecons Jacques Louis Lions 2024, Paris Sorbonne Université, 14-17 October 2024
- Lectio Magistralis, Opening of the Genova Science Festival, Genua, Italy, 24 October 2024
- The Blaise Pascal Lecture in Mathematics 2024, Lisbon Academy of Sciences, 30 October 2024

- Göran Gustafsson Lectures in Mathematics 2025, KTH, Stockholm, September 2025

### **Organization of International Conferences and Workshops (chair)**

- First International Conference on Spectral and High Order Methods (ICOSAHOM), Como, Villa Olmo, June 1989 (co-chairman)
- Sixth International Conference on Domain Decomposition Methods, Como, Villa Olmo, (Italy) June 1992 (chairman)
- Workshop on Computational Fluid Dynamics, Scuola Normale Superiore, Pisa, (Italy) October 1993 (chairman)
- Workshop on Control Theory for Industrial applications, Scuola Normale Superiore, Pisa, (Italy) January 1996 (co-chairman)
- ESF European Research Conference on Mathematical and Numerical Models for the Simulation of Turbulent and Reactive Flows, Strasbourg, France, February 1996 (chairman)
- School on Numerical Approximation of Partial Differential Equations, International Center for Theoretical Physics, Trieste, (Italy) September 1996 (director)
- International Conference on Advanced Numerical Methods for Partial Differential Equations, International Center for Theoretical Physics, Trieste, (Italy) September 1996 (chairman)
- Workshop on "Images: Treatment, Analysis, Industrial and Medical Applications", Scuola Normale Superiore, Pisa (Italy), 11-14 January 1997 (co-director with Prof. P. L. Lions)
- C.I.M.E. Course on Advanced Numerical Approximation of Discontinuous Solutions of Conservation Equations, Cetraro, (Italy) June 1997 (director)
- Workshop on Parallel Computing in Applied Fluid Mechanics, Scuola Normale Superiore, Pisa, (Italy) September 1997 (co-director with Prof. T. Tezduyar)
- First AMIF International Conference, San Feliu de Guixol (Spain), 30 September - 3 October 1998 (co-chairman with P. L. Lions)
- Workshop on Advances on Stabilized Methods for Partial Differential Equations with Emphasis on Fluid Mechanics, Scuola Normale Superiore, Pisa, (Italy) April 1999 (with Prof. T. J. R. Hughes)
- Summer School on Computational Fluid Dynamics, Coimbra, Portugal, July 1999
- Second AMIF International Conference, Il Ciocco, Tuscany (Italy), 12-14 October 2000 (co-chairman with P. L. Lions)
- Workshop on Modelling and Simulation of Viscoelastic and Non-Newtonian Fluids, Scuola Normale Superiore, Pisa, (Italy) October 2000 (with Prof. A. Fasano)
- Workshop on Cardiovascular System: from Mathematical Models to Clinical Applications, MOX, Politecnico di Milano, 6-8 March 2002
- Summer School on Mathematical Modelling of the Cardiovascular System, EPFL, Lausanne, August 25-30, 2003
- 1st International Symposium on Modeling of Physiological Flows (MPF2003), EPFL, Lausanne, 1-3 September 2003
- Workshop (Progetto Intergruppo INDAM 2004): 'Integrazione di sistemi complessi in biomedicina: modelli, simulazione, rappresentazioni', Bergamo, Italy, 22-24 November 2004
- 2nd International Symposium on Modeling of Physiological Flows (MPF2005), Sesimbra, Portugal, 31 March-2 April, 2005
- Third International Symposium on Modeling of Physiological Flows (MPF2006), Bergamo, Italy, 25-27 September 2006
- MATHKNOW08, Mathematics and Knowledge, Politecnico di Milano, Milan, 22-24 May 2008, co-chair
- EMS-SMI Summer School on Mathematical and Numerical Models of the Cardiovascular System, Cortona, Italy, 18-30 August 2008
- Advances in Mathematical Analysis, Workshop, EPFL (Lausanne), 26-27 March 2009
- Minisymposium on Coupled problems : analysis, simulation, applications, SIAM EDP Conference, Miami, FL, 6-10 December 2009
- CECAM Workshop on « Trends in Computational Hemodynamics », Lausanne, Switzerland, 10-12 May 2010

- 4th Int. Symposium on Modelling of Physiological Flows (MPF 2010), Chia Laguna, Sardinia, 2-5 June 2010
- Workshop on Computational Mathematics in Science and Engineering, CADMOS, EPFL, Lausanne, 1-2 September 2010
- Rocca MIT-PoliMi Workshop on Reduction Strategies for the Simulation of Complex Problems, Milan, 19-21 January 2011 (co-organizer : Anthony T Patera)
- IMA Thematic Year on Simulating Our Complex World: Modeling, Computation and Analysis, September 1, 2010 - June 30, 2011 – Co-organizer
- IMA Workshop on Computing in Image Processing, Computer Graphics, Virtual Surgery, and Sports, 5-11 March 2011, Co-organizer.
- ACMAC (Archimedes Center for Model, Analysis and Computation), Modern Techniques in the Numerical Solution of Partial Differential Equations Workshop, September 19-23, 2011, Heraklion, Greece, Organizing Committee
- RISM 3, Riemann International School of Mathematics on Multiphysics and Multiphase Flows, Verbania, 25-30 September 2011, Director
- International Conference on Scientific Computing, SC 2011, S.Margherita di Pula, Sardinia, Italy, October 10-14, 2011, Co-organizer (with Carsten Carstensen) of the minisymposium on Numerical Approximation of PDEs
- Workshop on Free Surface Flows: Numerical Methodologies and Application to Naval Architecture, SISSA, Trieste, 23-24 February 2012, Organizing and Scientific Committee
- CECAM Workshop on Reduced Basis, POD and Reduced Order Methods for model and computational reduction: 14-16 May, 2012, Co-organizer (with G.Rozza)
- SIAM Annual Meeting 2012, Minneapolis, MN, 9-13 July 2012, member of the Organizing Committee
- 5<sup>th</sup> International Symposium on Modelling of Physiological Flows (MPF 2013), Chia Laguna, Sardinia, 11-15 June 2013
- RISM (Riemann International School of Mathematics) 2019, Varese, Italy, 22-24 July 2019
- International Conference on Modeling the Cardiac Function (MCF), 2019, 2021, 2022 (Chair)
- 7<sup>th</sup> International Conference on Computational and Mathematical Biomedical Engineering, Milan, 28-30 June 2022 (Honorary Chair)
- Interfaces and Unfitted Discretization Methods, Institute Mittag-Leffler, Stockholm, co-organizer, Fall 2025

### **Colloquia, Seminars and Other Invited Talks**

#### **1977**

- International Congress of Mathematicians, Helsinki University, August 1977

#### **1978**

- Institut für Angewandte Mathematik, Bonn University, October 1978

#### **1979**

- Congresso dell'Unione Matematica Italiana, University of Palermo, September 1979

#### **1980**

- Laboratoire d'Analyse Numérique, University of Paris VI: February 1980 and March 1980
- Oberwolfach Meeting on "Finite Elements", Oberwolfach (Germany), August 1980

#### **1981**

- Politecnico of Torino (Italy), January 1981
- Department of Mathematics of the University of Tel Aviv (Israel), May 1981
- Ecole Polytechnique Fédérale of Lausanne (Switzerland), May 1981

#### **1982**

- Institute for Computer Applications in Science and Engineering (ICASE) (NASA Langley Research Center, Hampton, Virginia), May 1982

- Workshop on "Spectral Methods for Partial Differential Equations", Hampton (Virginia), August 1982
- Euromech 159 on "Spectral Methods in Computational Fluid Dynamics", Nice (France), September 1982

### 1983

- Laboratoire d'Analyse Numérique, University of Paris VI: June 1983
- C.I.M.E. Course on Numerical Methods in Fluid Dynamics, Como (Italy), July 1983
- French-Soviet-Italian Symposium on Computational Mathematics and Applications INRIA-Novosibirsk
- Pavia Meeting, Rocquencourt (France), December 1983

### 1984

- First German-Italian Symposium on "Applications of Mathematics to Technology", Rome, March 1984
- Institute for Computer Applications in Science and Engineering (ICASE) (NASA Langley Research Center, Hampton, Virginia), April 1984
- I.M.A., Institute of Mathematics and Applications, Minneapolis (Minnesota), November 1984
- Department of Mathematics of the University of Maryland, College Park (Maryland), November 1984
- Department of Mathematics, University of Chicago, November 1984
- Institute for Computer Applications in Science and Engineering (ICASE) (NASA Langley Research Center, Hampton, Virginia), December 1984

### 1985

- Oberwolfach meeting on "Multivariate Approximation Theory", January 1985
- School of Mathematics, University of Minnesota, Minneapolis, February 1985
- Ecole Polytechnique, Centre de Mathématiques Appliquées, Palaiseau (France), October 1985
- Laboratoire d'Analyse Numérique, University of Paris VI: October 1985
- Department of Mathematics, University of Rennes (France), December 1985
- Seventh International Conference on Computing Methods in Applied Sciences and Engineering, Versailles (France), December 1985

### 1986

- Department of Mathematics, Università La Sapienza, Rome (Italy), January 1986
- INRIA School on "Spectral methods for nonlinear problems", Rocquencourt (France), January 1986
- I.M.A., Institute of Mathematics and Applications, Minneapolis (Minnesota), September 1986

### 1987

- INRIA Sophia Antipolis, France, 27 February 1987
- INRIA "School on Spectral Methods, for nonlinear problems 2", Rocquencourt (France), 24 March 1987
- SASIAM, Tecnopolis, Bari (Italy), 7 May 1987
- Istituto per le Applicazioni del Calcolo-C.N.R., Rome, 9 May 1987
- Politecnico of Milan (Italy), 11 May 1987
- Scuola Normale Superiore of Pisa (Italy), 19 May 1987
- Akademia Nauk., Moscow, 22-26 June 1987
- 2nd Int. Symp. on Vector and Parallel Computers, Accademia Nazionale dei Lincei, Rome, 22 September 1987

### 1988

- M.I.T., Cambridge (Massachusetts), 12 January 1988
- ICASE, NASA Langley Research Center, Hampton (Virginia), 19 January 1988
- SASIAM, Tecnopolis, Bari (Italy): Course on Computational Fluid Dynamics, 14-18 March 1988
- Politecnico of Milan (Italy), 25 March 1988

- Third German-Italian Symposium on "Applications of Mathematics to Technology", Siena, June 1988
- ICASE, NASA Langley Research Center, Hampton (Virginia), 7 September 1988
- International Meeting on Parallel Computing: Methods, Algorithms, Applications, Verona (Italy), 29 September 1988
- Department of Mathematics, University of Padova (Italy), 7 December 1988

#### 1989

- Summer School on Domain Decompositions, Lambrecht, Pfalz Akademie (W. Germany), 1-5 May 1989 (cospeaker: prof. A.T.Patera, M.I.T., Cambridge)
- IBM Europe Institute on "Numerical Software", Garmisch (W. Germany), 1-5 August 1989
- International Conference on "Numerical Methods for Scientific Computing", Rolf Nevanlinna Institute, Helsinki, 20-25 August 1989
- Summer School on "Efficient Methods for Partial Differential Equations", University of Jyväskylä, Finland, 28 August - 1st September 1989 (as unique speaker)
- Venice, Italy: 1-4 October 1989: Int. Symp. on Applied and Industrial Mathematics
- Pavia, Italy: October 5, 1989, Fourth Italian-French-Soviet Symposium on Computational Mathematics and Applications

#### 1990

- Minnesota Supercomputer Institute, Minneapolis, March 16, 1990
- Department of Computer Science, Purdue University, Lafayette, March 17, 1990
- 8th Int. Conference on Water Resources, Venice, 11-15 June 1990
- SERC Summer School on Numerical Analysis, Lancaster (U.K.), 16-20 July 1990 (main speaker)
- 2nd WCCM, Stuttgart (West Germany), 27-31 August, 1990
- Army High Performance Computing Research Center, Minneapolis, 13 November 1990

#### 1991

- Minnesota Supercomputer Institute, Minneapolis, 6 February 1991
- California Institute of Technology, Pasadena, 25 February 1991
- University of California at Los Angeles, 26 February 1991
- 5th Int. Conf. on Domain Decomposition Methods, Norfolk, VA, 6 May 1991
- University of Maryland, College Park, 9 May 1991
- 1st U.S. Conference on Computational Mechanics, Chicago, 22 July 1991
- University of Hong Kong, 16 August 1991
- Hangzhou (China), International Conference on Scientific Computing, 21 August 1991
- Shanghai University of Science and Technology, 26 August 1991
- Computer Centre of Academia Sinica, Beijing, 29 August 1991
- Catania, XIV U.M.I. Symposium, keynote lecture, 20 September 1991

#### 1992

- Montpellier, 2nd ICOSAHOM, 22-26 June 1992, (keynote lecturer)
- Cagliari, International Conference on Numeric Intensive Computation in Physics and Chemistry, September 1992

#### 1993

- Rome, International Conference in Numerical Analysis for Partial Differential Equations, January 1993
- Sophia Antipolis, (France), Numerical Tools in Scientific Computation with Applications to Flow, Turbulence and Combustion, 17-19 March 1993
- Minneapolis, IMA Workshop on Adaptive Methods, 19-23 July 1993
- Barcelona, Tutorial on Domain Decomposition Methods, 16-18 September 1993, (keynote lecturer)
- Heidelberg, Workshop on Mathematical and Numerical Methods for Navier-Stokes Equations, 25-28 October 1993

#### 1994

- Von Karman Institute, Bruxelles, 10 March 1994. - Penn-State University, State College, PA, 22 April 1994
- Minnesota Supercomputer Institute, Minneapolis, (U.S.A), Workshop on Domain Based Parallelism, 24 April 1994
- Stuttgart, 2nd ECCOMASS Conference, 5-8 September, 1994 (keynote lecturer)
- Scuola Normale Superiore, Pisa, 8 November 1994
- Institut Henry Poincaré, Paris, 21 November 1994

#### 1995

- University of Stuttgart, 27 January 1995
- San Antonio, TX, SIAM Geosciences Meeting, 10 February 1995
- ISMES, Bergamo (Italy), Quality of Scientific and Technical Computing, 11 April 1995
- Roma, Università "La Sapienza", 26 May 1995
- NATO-ASI School on Hypersonic Flows, Maratea, 27-31 May 1995 (keynote lecturer).
- ICIAM, Hamburg, July 1995, Plenary Speaker
- IMACS, International Conference on "Three Dimensional Complex Flows", EPFL, Lausanne, 13-15 September 1995 (keynote lecturer)
- Tunis, International Conference on "Numerical Modeling of Oil Reservoirs", 20-21 September 1995
- Pavia, French - Italian - Russian Symposium, October 13, 1995
- Venice, FEMIF 95, 19 October 1995 (keynote lecturer)
- Montreal, Workshop on Numerical Methods in Fluid Mechanics, 11-16 November 1995, (main lecturer)
- M.I.T., Cambridge (Massachusetts), Dept. of Mech. Eng., 17 November 1995

#### 1996

- University of Pisa, Dept. of Math., 11 January 1996
- ETH (Polytechnic of Zurich), Parallel CFD Days, 13 March 1996
- University of Maryland, College Park, Dept. of Math., 9 April 1996
- Parallel CFD Conference, Capri, 19-23 May, 1996 (keynote lecturer)
- SIMAI-GAMM Conference, Pavia, 29 May 1996 (keynote lecturer)
- International Linear Algebra Year Conference, CERFACS, Toulouse, 11-14 June, 1996
- International Conference in Theoretical and Numerical Fluid Mechanics, Vancouver, 29 July - 2 August, 1996
- AHPCRC, University of Minnesota, 9 August, 1996
- School of Mathematics, University of Minnesota, Minneapolis, 12 August 1996
- Eccomas, Paris, 9-13 September 1996, Organizer of a minisymposium
- First Italian-Latin American Conference on Computational Mechanics, Padova, Italy, 26 September 1996 (keynote lecturer)
- Polytechnic of Turin, 14 October 1996
- Annual Conference on Scientific Research, Accademia Nazionale dei Lincei, Rome, 22 October 1996

#### 1997

- CIRIC seminar, Politecnico di Milano, 28 January, 1997
- International Conference on Mathematical and Numerical Aspects of Fluid Mechanics, Lisbon, 27 February - 2 March, 1997
- Scientific Computing for the 21st Century, Tours, 6-7 May, Conference in honor of R.Glowinski
- International Conference on Theoretical and Computational Aspects of Navier-Stokes Equations, Varenna (Italy), 4 June 1997
- International Conference on Numerical Modeling in Continuum Mechanics, , Prague, 8-11 September 1997, (keynote lecturer)
- Workshop on Parallel Computing in Applied Fluid Mechanics, Scuola Normale Superiore, Pisa, (Italy) september 97 (lecturer)
- International Conference on Stability of Waves, Monopoli (Italy), october 97 (lecturer)
- University of Pisa, 14 October 1997
- Lombard Academy of Sciences, 23 October 1997

- Diderot Mathematical Forum, Venezia 18-19 December 1997, (lecturer)

### 1998

- Brown University, 21 January 1998
- Courant Institute, New York University, Conference in honour of Olof Widlund, 24 January 1998
- University of Kaiserslautern, Germany, 10-12 February 1998: compact course on Domain Decomposition Methods in Fluid Dynamics (10 hours)
- ITWM-Kolloquium, ITWM, University of Kaiserslautern, Germany, 13 February 1998
- Oberwolfach, Domain Decomposition and Multifield Problems, 27-30 April 1998
- Trieste (Italy), International Workshop on Nonlinear Conservation Laws, 14 May 1998
- Marseille, CaNum98, 21 May 1998
- Paris, Conference in honour of Jacques-Louis Lions, 27 May 1998
- University of Greenwich, 11th Int. Conf. on Domain Decomposition Methods, 23 July 1998
- NATO-ASI School on Adaptive Methods, Antalya, Turkey, 10-20 August 1998 (4 lectures)
- Centro Volta, Como (Italy), International School on Turbulence, 7 September 1998
- Annual Meeting of the Swiss Mathematical Society, Airolo, 23 September 1998
- ETH Zurich, 50th anniversary of SAM (Seminar of Applied Mathematics), 18-22 November 1998

### 1999

- Scuola Normale Superiore, Pisa (Italy), Workshop on Stabilized Methods, 19 April 1999
- Monte Verità, Ascona (Switzerland), Workshop "Computational Sciences and Engineering", 4 May 1999
- Coimbra (Lisbon), 12-17 July, 1999, Summer School on Computational Fluid Dynamics, keynote lecturer (5 lectures)
- University of Boulder, Colorado, 4-6 August 1999: U.S. National Conference on Computational Mechanics, invited talk
- Department of Mathematics, University of Texas at Austin, 10 August 1999
- University of Heidelberg, 6 September 1999, EMS-IWR Summer School, keynote lecturer
- University of Marseille, 13 September 1999, Conference on the State of the Art in CFD, keynote lecturer
- University of Ferrara, Italy, 15 September 1999, Int. Conf. on Navier-Stokes Equations, keynote lecturer

### 2000

- Intern. Conf. On Navier-Stokes Equations (Conference in honour of John Heywood), Capo-Miseno (Italy), 28-31 May 2000, plenary lecturer
- University of Aachen, 30 June 2000
- IMACS2000 International Conference, Lausanne, 21-25 September 2000, invited lecturer at AMIF Minisymposium
- ECCOMAS2000 International Conference, Barcelona, 11-14 October 2000, keynote lecturer
- Int.Symp. on Mathematical Modeling and Numerical Simulation in Continuum Mechanics, Yamaguchi University, Japan, Sept.29 - Oct.3, 2000, plenary lecturer

### 2001

- Instructional Conference on Nonlinear Partial Differential Equations, Heriot-Watt University, Edinburgh, 12 January 2001, invited lecturer
- International Workshop on « Simulation in Hemodynamics », University of Chicago, 21-23 March, 2001, invited lecturer
- International Conference on « Mathematics and Culture 2001 », Venice, 30-31 March 2001, invited lecturer
- International Conference on Contemporary Challenges in Applied Fluid Mechanics, Cape Miseno, Italy, June 1-5, 2001, invited lecturer
- 19th Biennial Conference on Numerical Analysis, University of Dundee, 26-29 June 2001, invited lecturer
- Symposium on Haemodynamics, ISB Congress 2001, Zurich, 8-12 July, 2001, invited lecturer
- Equadiff 10, Prague, 27-31 August, 2001, invited lecturer

- First SIAM/EMS Conference, Berlin, September 2-6, 2001, plenary lecturer
- Swiss-Japanese Seminar on « New Directions in Cellular and Tissues Biomechanics », 24-28 September, 2001, invited lecturer
- IPERCT01, National Conference on Hyperbolic Problems, Catania, Italy, 23 November 2001, invited lecturer
- Université de Paris VI, Séminaire d'Analyse Numérique, December 7, 2001

## 2002

- Max-Planck Institute for Mathematical Sciences, Leipzig, Germany, 18 January 2002
- International Workshop on Cardiovascular System: from Mathematical Modelling to Clinical Applications, Milan, March 8, 2002, invited lecturer
- Vismath 2002, Berlin, May 25, 2002, plenary lecturer
- University of Trento, Faculty of Engineering, 6 June 2002
- FBP2002 (International Conference on Free Boundary Problems), Trento, June 7, 2002, invited lecturer
- EMSTB, 5th International Conference on Mathematical Modeling and Computing in Biology and Medicine, University of Milan, 2-6 July, 2002
- WCCM5, Wien, July 8, 2002, minisymposium on Stabilized and Multiscale Finite Elements
- MSRI Summer School on Blood Flow, 29 July - 2 August, 2002, keynote lecturer
- International Conference on Nonlinear Partial Differential Equations, City University of Hong Kong, 29 July - 2 August, 2002, invited lecturer
- Kyushu University, Fukuoka (Japan), 17 September 2002
- The University of Electro-Communication, Tokyo, 24 September 2002
- University of Linz, Kepler Colloquium, November 5, 2002
- University of Vienna, Department of Mathematics, Colloquium, November 6, 2002
- Annual Ercoftac meeting, LEC (Leonard Euler Center), EPFL, Lausanne, 8 November 2002 (keynote speaker)
- Lombard Academy of Sciences, Milan, November 15, 2002
- Technical University of Berlin, International Conference on « Mathematics for Key Technologies », invited speaker, November 21, 2002
- Cogne, Italy, PRISTEM Annual Meeting, invited speaker, November 23, 2002
- Picone Lecture, University of Rome La Sapienza, December 6, 2002

## 2003

- Newton Institute, University of Cambridge, UK, invited speaker, January 24, 2003
- Mathematics Colloquium, University of Maryland, College Park, MD, 6 March 2003
- CHUV (University Hospital), Lausanne, European Meeting on Congenital Heart Diseases, invited lecture, March 29, 2003
- CERN Colloquium, Geneva, Switzerland, June 5, 2003
- University of Pavia, Conference in honour of Prof. E. Magenes, invited lecture, June 19, 2003
- University of Madeira, Portugal, Int. Conf. On Nonlinear Partial Differential Equations, invited lecture, June 27, 2003
- ICIAM2003, Sydney, invited lecture in a minisymposium, July 10, 2003
- HERCMA 2003, Athens, September 2003, plenary lecture.
- WIAS, Berlin, September 2003, lecture series
- University of Trieste, 10 October 2003
- Third Italo-Chinese International Conference, Grado, Italy, November 17, 2003
- Journée Calcul Scientifique et Applications Technologiques, Marcel Dassault Aviation, St. Cloud, Paris, November 27, 2003, invited lecture
- University of Crema, December 1<sup>st</sup>, 2003, invited seminar
- Museum of Science and Technology "Leonardo Da Vinci", Milan, December 9, 2003
- University of Florence, Italy, December 15, 2003

## 2004

- WONAPDE 2004, Concepcion, Chile, January 13, 2004, Plenary Lecturer
- University of Bologna, Italy, February, 18, 2004, invited seminar

- Istituto Lombardo di Scienze e Lettere, Milan, February, 19, 2004, Opening Conference Cycle
- Universidad autonoma de Madrid, Spain, March, 1-5, 2004, lecture series
- Rice University, Houston, USA, April 7-9, 2004, Conference: Advances in Computational Mechanics, Invited Plenary Lecturer
- Lugano and Locarno, Ticino, Switerland, May 3, 2004, Lecturer
- DD60 Science Festival, Berlin, Germany, May 7, 2004, Plenary Lecturer
- Catholic University Brescia, Italy, May 20, 2004, Invited Lecturer
- EPFL, Lausanne, High Tech Cars' day, May 27, 2004, Invited Lecturer
- ASM 2004, Applied Simulation and Modelling, IASTED, Rhodes, Greece, June 28-30, 2004, Invited Plenary Lecturer
- ICCFD 3, Utias, Toronto, Canada, July 12-16, 2004, Invited Plenary Lecturer
- ECCOMAS 2004, Jyvaskyla, Finland, July 24-28, 2004, Invited Plenary Lecturer
- CEMRACS 04, Marseille, France, July 26-30, 2004, Summer School Lecturer
- Nuova Scienza, Nuova Industria, Le sfide per la nuova Europa, Accademia dei Lincei-Fondazione Edison, Roma, Italy, 13-14 october 2004, Lecturer
- Istituto Lombardo di Scienze e Lettere, Omaggio a Eugenio Beltrami, 15 October 2004, Milan
- XXIV Congresso UMI-CIM, Matematica, Scuola, Societa', 21-22 October 2004, Catania, Italy, Plenary lecturer
- Matematica e Cultura, University of Bologna, 23 October 2004, Plenary lecturer
- International Conference on the Research Trend for PDE Modeling and Computation, Brown University, 7-8 November 2004, Providence, RI (USA)
- University of Modena, Italy, 6 December 2004, invited seminar

## 2005

- University of Naples, Italy, 3 February 2005, invited seminar
- "Alla Corte di Federico II", Naples, Italy, 3 February 2005, Colloquium
- University of Bari, Italy, two invited seminars, 11-12 March 2005
- Matematica e Cultura 2005, Venice, Italy, plenary talk, 18 March 2005
- Conference in Locarno on America's Cup with J.A. Manson, 11 April 2005
- Conference in honour of Carlo Banfi, Catholic University of Brescia, plenary talk, 22 April 2005
- Fourth International Workshop on Scientific Computing and its Applications, Shanghai Jiaotong University, Shanghai, China, June 20-23, 2005
- Mathematical Models in Life Sciences: Theory and Simulation, Summer School, Dobbiaco, Italy, 1-5 July 2005, Lecturer
- System Modeling and Optimization, IFIP TC7 Conference, Politecnico di Torino, plenary talk, 18-22 July 2005
- International Conference on Advances in Numerical Mathematics, 60<sup>th</sup> Birthday of Y. Kuznetsov, Moscow, Russia, 16-17 September 2005, Invited speaker
- Computational Life Sciences Workshop, Innsbruck, Austria, 12-15 October 2005, Invited speaker
- Istituto Lombardo Scienze e Lettere, Milan, Italy, November 2005, contributed lecturer

## 2006

- FluBio, University of Genova, Italy, 7 March 2006, Plenary Lecturer
- University of Genova, Italy, 8 March 2006, Invited Seminar
- Museo Mineralogico Campano, Vico Equense, Italy, 18 March 2006
- Matematica e Cultura 2006, Ca'Foscari University, Venice, 24-26 March 2006, Invited Lecturer
- ECCOMAS summer school on fluid structure interaction, Ibiza, Spain, 3-7 May 2006, Lecturer
- Scientiae Munus, Parma, Italy, 8 May 2006, invited Seminar
- SIMAI 2006, Italian Society for Industrial Applied Mathematics, Baia Samuele (Ragusa), Italy, 22-26 May 2006, Invited Speaker in the Session "New Trends in Scientific Computing"
- Scientific Conference Series, University of Perugia, 5 June 2006, Invited Lecturer
- MAFELAP, Mathematics of Finite Element and Applications, Brunel University, UK, 13-16 June 2006, Invited Speaker
- Conference "Comportement asymptotique en mécanique des fluides", Bernoulli Centre, EPFL, Lausanne, 24 July 2006, Invited Speaker
- ICM 2006 (International Congress of Mathematicians), Madrid, August 2006, plenary lecturer

- International Conference on Multifields Problems, Stuttgart, 4-6 October, plenary talk
- Inauguration of Ulm Center of Scientific Computing, Ulm, 23 November 2006, invited speaker
- Cluster Symposium on Numerical Methods for Model Order Reduction, Eindhoven University of Technology, 6 December 2006, invited lecture
- Philips NXP, Eindhoven, 8 December 2006, invited seminar
- Cluster Symposium on Numerical Methods for Medical Applications, Eindhoven University of Technology, 13 December 2006, invited lecture

## 2007

- University of Pisa, 11 January 2007, colloquium
- University of Cassino, 5 February 2007, invited lecture
- Basel Computational Biology Conference, Basel, 13 March 2007, invited lecture
- Workshop on Geometric Tomography and Applications, Politecnico of Milano, 30 March 2007, invited lecture
- Lagrange Lecture, University of Turin, 7 May 2007
- International Euler Symposium, Basel, 31 May 2007, plenary lecture
- International Conference on Recent Developments of Numerical Schemes for Flow Problems, Kyushu University, Fukuoka, 27 June 2007, plenary lecture
- ICIAM 2007, Zurich, 19 July 2007, minisymposium on computational medicine, invited lecture
- International Conference of Theoretical and Numerical Fluid Mechanics III, Vancouver, 16 August 2007, plenary lecture
- Corso di Orientamento della Scuola Normale Superiore di Pisa, Rovereto, Italy, 2 September 2007, invited lecture
- Conference in honour of Jacques Rappaz on the occasion of his 60th birthday, 6 September 2007, Lausanne, invited lecture
- Workshop on Blood Modelling, Aachen, Germany, 21 September 2007, invited lecture
- Festa della matematica, Castel San Pietro, Bologna, 6 October 2007, invited lecture
- Ispettorato PI Milano, 9 October 2007, invited lecture
- 2<sup>nd</sup> GACM Colloquium on Computational Mechanics, Munich, 12 October 2007, plenary lecture
- Politecnico di Milano, Colloquia of the Doctoral School, 15 October 2007
- Galileian year, Piccolo Teatro, Milano, 24 October 2007, invited lecture
- Tecnologie CAE per l'industria, priorità e sfide, Stezzano, Italy, 25 October 2007, keynote lecture
- Genova Science Festival, Italy, 27 October 2007, invited lecture
- Conference on Blood Diseases, Lyon, 8 November 2007, invited lecture
- Year of Computational Sciences, Universidad Autonoma de Barcelona, 12 November 2007, public lecture
- Confindustria-Orientagiovani, Fabriano, Italy, 16 November 2007, keynote lecture
- Holst memorial, TU Eindhoven, 22 November 2007, plenary lecture
- SIAM Conference on Analysis of Partial Differential Equations, Phoenix (AZ), USA, 28 November 2007, plenary lecture

## 2008

- DD18, 18<sup>th</sup> International Conference on Domain Decomposition Methods, Hebrew University of Jerusalem, 16 January 2008, invited
- University of Florence, Lincei per la Scuola, public lecture, 2 February 2008
- IMA, University of Minnesota, Minneapolis, 13 February 2008, Math matters public lecture
- University of Houston, Department of Mathematics, Colloquium, 15 February 2008
- Rose School on Engineering Seismology, University of Pavia, 11 March 2008, 4 lectures
- Festival della Matematica, Rome, Auditorium della Musica, Lectio Magistralis, 16 March 2008
- Workshop on Present and Future Trends in Computational Modeling of the Cardiovascular System, Rio de Janeiro, 6-7 May 2008, 3 lectures
- CEFRIEL, Milan, invited seminar, 16 May 2008
- International Workshop on Mathematics and Water, Zaragoza, Spain, 19-21 May 2008, invited lecture
- International Conference on Mathematics and Knowledge, Politecnico di Milano, Milan, 22-24 May 2008, invited lecture

- CSFI08, National Conference on Computational Physics, invited lecture, 30 May 2008
- Politecnico di Milano, Mathematical Culture Lecture Series, invited lecture, 3 June 2008
- Oxford Centre for Nonlinear PDE, invited lecture, Oxford, 5 June 2008
- WCCM8-Eccomas 2008, plenary lecture, Venice, 30 June - 4 July 2008
- WCCM8-Eccomas 2008, Symposium in honor of Prof. G.Maier, invited talk, Venice, 30 June - 4 July 2008
- ESOF 2008, Barcelona, invited talk
- Pavia, Festival dei Saperi, open lecture, 6 september, 2008
- Scuola Normale Superiore di Pisa, Corso di Orientamento, San Miniato, 7 September 2008
- CASPUR workshop on Parallel Computing, Grottaferrata, 9 September 2008, four lectures
- SIAM-SIMAI Conference, Rome, 16 September 2008, plenary lecturer.
- Santalo' Lecture, Universidad Complutense de Madrid, 16 October 2008
- Faculty of Mathematical Science, Universidad Complutense de Madrid, 17 October 2008, invited seminar
- International Conference on New Trends in Industrial and Applied Mathematics, University of Catania, 10-13 November 2008, invited lecture
- CESAER (19<sup>th</sup> Conference of European Schools for Advanced Engineering Education and Research), invited speaker, Politecnico di Milano, 13 November 2008
- International Workshop on Advanced Numerical Methods in Seismology, University of Brescia, 17 November 2008, invited lecture
- Centre for Mathematical Sciences, University of Cambridge, DAMTP/CMS seminar, 21 November 2008
- University of Oxford, "Alan Tayler Lecture 2008", 24 November 2008

## 2009

- Warwick Mathematics Institute, EPSRC Symposium Workshop on New Directions in Computational PDEs, 15 January 2009, invited lecture
- Warwick Mathematics Institute, Department Colloquium, 16 January 2009
- University of Trento, Italy, Department of Mathematics Colloquium, 30 January 2009
- Lombard Academy of Science, invited lecture, 5 February 2009
- Vietnamese Academy of Science, Int Conf HPSC 2009, 3 March 2009, plenary speaker
- University of Roma "Tor Vergata", Department of Mathematics Colloquium, 16 March 2009
- ENIT (Ecole Nationale d'Ingénieurs de Tunis), Colloquium LAMSIN-ENIT, 24 April 2009
- Ettore Majorana Centre for Scientific Culture, Erice, International Conference on "Variational Analysis and Applications", 11 May 2009, invited lecture
- ECM2009 International Conference, Hong Kong Polytechnic University, 29 May 2009, plenary speaker
- Eccomas Conference on Coupled Problems, Ischia Island, 10 June 2009
- Technical University of Munich, International Conference for the 50<sup>th</sup> anniversary of Numerische Mathematik, invited lecture
- CIME-EMS Summer School in Applied Mathematics. Multiscale and Adaptivity: Modeling, Numerics and Applications, Cetraro 7-11 July 2009, invited lecturer (6 Lectures)
- ICCB 2009 (IV International Conference on Computational Bioengineering), Bertinoro, Italy, 16-18 September 2009, keynote lecture
- 17<sup>th</sup> OMG Congress – Annual DMV Meeting (joint conference between Austrian and German Mathematical Societies), Graz, Austria, 20-25 September 2009, plenary lecture
- Politecnico di Milano, Progetto Rocca, 28 September 2009
- 5<sup>th</sup> China-Italy Conference on Computational and Applied Mathematics, INDAM, Rome, invited lecture, 9 November 2009
- Scuola Superiore di Catania, University of Catania, plenary lecture, 21 November 2009
- Int. Conf. on Advances on Scientific Computing, Brown University, Providence, RI, invited lecture, 6 December 2009

## 2010

- SISSA, Trieste, Director's Colloquium, 7 January 2010

- Centro Tecnico Sportivo della Confederazione Svizzera, Tenero, Switzerland, public conference, 18 January 2010
- ICES Colloquium, University of Texas at Austin, 2 February 2010
- Frontiers Lectures, Texas A&M University, College Station, 1-5 February, 2010
- HAFS, High Order Flow Simulations, Lausanne, 15-16 February 2010, invited speaker
- International Colloquium on "Perspectives in Fundamental Research". Tata Institute of Fundamental Research, Mumbai, India, 2-6 March 2010, plenary speaker
- IAMCS workshop on Complex Fluid Dynamics, KAUST, Saudi Arabia, 22-25 March 2010, invited speaker
- ETH/UZH Kolloquium in Mathematics, University of Zurich, 27 April 2010
- The XXVth Courant Lectures 2010, Courant Institute, NYU, 29-30 April 2010
- CISM Course on Computational Fluid Structure Interaction, 6 Lectures, 6-7 September 2010, CISM, Udine, Italy
- Workshop on Variational Analysis and Aerospace Engineering, invited speaker, Ettore Majorana Center for Scientific Culture, Erice, Italy, 10 September 2010
- ICNAAM 2010, Rhodos, Crete, 19-25 September 2010, plenary speaker
- Symposium of Applied Mathematics, Lothar Collatz 100<sup>th</sup> Birthday, University of Hamburg, 7-8 October 2010, plenary speaker
- Colloquium, Mathematics Department, University of L'Aquila, 26 October 2010
- OxPDE Workshop on Partial Differential Equations, Oxford, 12 November 2010
- MIT Computational Engineering Seminar, MIT, Cambridge, 9 December 2010

## 2011

- Africomp, Cape-Town, 7 January 2011, plenary speaker
- Georgia Scientific Computing Seminar, keynote speaker, Emory University, 12 February 2011
- SIAM Conference on Computational Science and Engineering, Reno, Nevada, February 28 – March 4, 2011, plenary speaker
- SIAM Conference on Computational Science and Engineering, Reno, Nevada, February 28 – March 4, 2011, minisymposium on reduced order models for complex problems, invited speaker
- IMA Workshop on Computing in Image Processing, Computer Graphics, Virtual Surgery, and Sports, 5- 11 March, 2011, plenary speaker.
- TED Talk, Trieste, April 8, 2011 <http://www.ted.com/talks>
- Colloquium on the 100<sup>th</sup> anniversary of the Real Sociedad Matematica Espanola, La Coruna, Spain, 9<sup>th</sup> May, 2011
- Workshop on Fast Solution of Partial Differential Equations, Oberwolfach, 24 May 2011, invited speaker
- Jacques Morgenstern Colloquium, INRIA Sophia-Antipolis, 9 June 2011  
<http://www-sop.inria.fr/colloquium/intervenant.php?nom=Quarteroni&prenom=Alfio>
- New Trends in Analysis and Control of Nonlinear PDEs, INDAM, Rome, 12-15 June 2011, invited speaker <http://www.altamatematica.it/it/node/60>
- Università Campus Biomedico, Rome, 14 June 2011
- Sixth Summer School in Analysis and Applied Mathematics, Università La Sapienza, Rome, 20-24 June 2011, keynote lecturer (6 hours)  
<http://www.mat.uniroma1.it/people/garroni/School2011.html>
- The R.Mitchell lecture 2011, 24<sup>th</sup> Biennial Conference on Numerical Analysis, University of Strathclyde, Glasgow, June 2011 <http://www.mathstat.strath.ac.uk/naconf>
- International Conference on Numerical Methods for Hyperbolic Equations. Theory of Applications, plenary speaker, Santiago de Compostela, 4-8 July, 2011  
<http://www.usc.es/gl/congresos/nmhetatoro65/index.html>
- RISM 3, Riemann International School of Mathematics on Multiphysics and Multiphase Flows, Verbania, 25 and 30 September 2011, 2 keynote lectures <http://www.mate.polimi.it/RISM3/>
- International Conference on Scientific Computing, SC 2011, S.Margherita di Pula, Sardinia, Italy, October 10-14, 2011, invited talk
- Analysis and Numerics of Partial Differential Equations, In memory of Enrico Magenes, Pavia, 2-4 November 2011, invited lecture <http://www.imati.cnr.it/magenes2011/>
- University of Graz, Austria, 11 November 2011, SFB Colloquium

- Simula Research Laboratory, Oslo, Challenges in Computing, 15-16 December 2011, plenary speaker <http://simula.no/about/challenges>

## 2012

- Institut Camille Jourdan Colloquium, Université de Lyon-1, 30 January 2012, Lyon
- Workshop on High Order Numerical Approximation for PDEs, Hausdorff Center for Mathematics, Bonn, February 6-10 2012, invited talk
- BCAM, Basque Center for Applied Mathematics, Bilbao, Public Lecture, 21 February 2012 [http://www.bcamath.org/documentos\\_public/archivos/actividades\\_cientificas/M4TEMOZIOAPosteraandAbstract.pdf](http://www.bcamath.org/documentos_public/archivos/actividades_cientificas/M4TEMOZIOAPosteraandAbstract.pdf)
- Harold J. Gay Lecture Series, WPI (Worcester Polytechnic Institute), 13 April 2012 <http://www.wpi.edu/academics/Depts/Math/News/lectureseries.html>
- Parallel CFD 2012, 24<sup>th</sup> International Conference on Parallel Computational Fluid Dynamics, May 21-25, 2012, Atlanta, plenary speaker <http://sites.jsums.edu/parcfd2012/>
- Industrial and Environmental Mathematics Day, Sevilla, 8 June 2012, keynote speaker
- Nexus 2012, Relationships between Architecture and Mathematics, Milan, 11-14 June 2012, Milan, plenary speaker
- ICCS 2012, International Conference on Computational Science, Shanghai Normal University, Shanghai, July 16-20, 2012, plenary speaker
- XI Franco-Romanian Colloquium, Bucharest, 24-30 August 2012, plenary speaker
- Barcelona ESF International Conference on “Applied Partial Differential Equations in Physics, Biology and Social Sciences: Classical and Modern Perspectives », Universidad Autonoma de Barcelona, 3-6 September 2012, keynote speaker
- ECCOMAS, Minisymposium on Multiphysics Problems, Vienna, 10 September 2012, keynote lecture
- IMA Conference on Mathematics of Medical Devices and Surgical Procedures, UCL, London, 18 September 2012
- Studium Generale Lecture, Opening Ceremony of the Eindhoven Multiscale Institute, TU Eindhoven, 24 October 2012
- Bocconi Pristem lecture, 16 November 2012

## 2013

- Public Lecture, Museo della Scienza e della Tecnologia, 150th birthday of Politecnico di Milano, 7 February 2013
- EU Regional Doctoral School, University of Aachen 18-19 February 2013, 2 minicourses
- Public Lecture, “I Venerdi dell’Universo”, Sala Estense, Ferrara, Italy, 15 March 2013
- Laboratoire Jacques Louis Lions, Université Paris VI, 29 March 2013
- Department of Mechanical and Aerospace Engineering, Stanford University, 11 April 2013
- Scientific Computing and Imaging Institute (SCI) Distinguished Lecture, University of Utah, 12 April 2013
- Institute for Computational & Mathematical Engineering (ICME) Colloquium, Stanford University, 15 April 2013
- Feng Kang Prize 2013, public lecture, Chinese Academy of Sciences, Beijing, 7 May 2013
- Peking University, public lecture, 8 May 2013
- Feng Kang Prize 2013, academic lecture, Chinese Academy of Sciences, Beijing, 9 May 2013
- Istituto Lombardo di Scienze e Lettere, Milan, invited lecture, 15 May 2013
- Computational Phantom 2013, International Workshop, plenary speaker, 22 May 2013
- Doctoral Course at University of Santiago de Compostela, Spain, 16-19 July 2013
- Third Int. Workshop on Thin Structures, Naples, 5-7 September 2013, invited lecture
- AlfaClass, Lectio Magistralis, Politecnico di Torino, 13 September 2013
- University of Konstanz, Mathematics Colloquium, November 28, 2013

## 2014

- ICERM Workshop on “From the Clinic to Partial Differential Equations and Back”, Brown University, plenary speaker, 20 January 2014 <http://icerm.brown.edu/tw14-1-pdecem>
- Accademia delle Scienze dell’Istituto di Bologna, 3 February 2014

<http://www.matematica.unibo.it/it/eventi/giornate-della-sezione-di-matematica-dellaccademia-delle-scienze-dellistituto-di-bologna>

- Recent Advances on Partial Differential Equations and Applications, Levico Terme, Italy, 18 February 2014, invited speaker <http://www.science.unitn.it/cirm/PDEs2014.html>
- Colloquia Patavina, Mathematics Department, University of Padova, 25 March 2014  
[http://www.math.unipd.it/~conti/colloquia\\_files/20140325\\_AlfioQuarteroni.html](http://www.math.unipd.it/~conti/colloquia_files/20140325_AlfioQuarteroni.html)
- The IMA Lighthill Lecture, British Applied Math Colloquium, BACM 2014, Cardiff University, 28 April 2014 <http://mathsevents.cf.ac.uk/bamc2014/>
- Ecole Polytechnique de Paris, Palaiseau, 22 Mai 2014  
<http://www.polytechnique.edu/accueil/actualites/seminaires-et-conferences/conference-les-mathematiques-pour-vivre-mieux--308884.kjsp>
- ECMI2014, plenary lecturer, Taormina, Italy, 10 June 2014 <http://www.taosciences.it/ecmi2014/>
- EMS distinguished speaker 2014, FJIM 2014, Bilbao, June 30 – July 4, 2014  
<http://www.euro-math-soc.eu/node/1810>
- ECMOR XIV keynote speaker 2014, 14<sup>th</sup> European Conference on the Mathematics of Oil Recovery, Catania, September 8-11, 2014 <http://www.eage.org/events/ecmor-2014>
- CMBBE 2014, The 12<sup>th</sup> International Symposium in Biomechanics and Biomedical Engineering, plenary speaker <http://www.cmbbe2014.com>
- 37<sup>th</sup> Israel Symposium on Computational Mechanics (IACMM), keynote speaker, Tel Aviv, October 23, 2014

## 2015

- National University of Singapore, Mathematics Colloquium, January 6, 2015
  - ZIB Colloquium, Konrad Zuse Center, Berlin, January 22, 2015
- FEF 2015, International Conference on Finite Elements for Fluids 2015, semi-plenary speaker, March 16-18, Taiwan, 2015
- International Conference on Optimization, Sparsity and Adaptive Data Analysis, Academia Sinica, Beijing, March 18-21, plenary speaker <http://osada.csp.escience.cn/dct/page/1>
- USI, Università della Svizzera Italiana, Lugano, March 31, 2015, Colloquium
- University of Naples Federico II, Alta Scuola Politecnica e delle Scienze di Base, Colloquium, April 15, 2015
- AFSI2015 International Conference, Istanbul (Turkey), 11-13 May 2015, Invited speaker
- AEIT Seminar, Politecnico di Milano, 19 May 2015
- XXIV CEDYA /XIV CMA, Cadiz (Spain), 8-12 June 2015, Plenary speaker
- Universidad de Sevilla (Spain), Public Lecture, 9 June 2015
- International Workshop on Computational Mathematics, Qingdao (China), 29 June- 2 July, 2015, Plenary speaker
- Third Aachen Conference on Computational Engineering Science (AC.CES), Aachen (Germany), 23-24 July 2015, Plenary speaker
- SMI Summer School on « Integrated Models for Computational Medicine », 26-31 July 2015, main lecturer
- Variational Analysis and Aerospace Engineering, III, International Center for Scientific Culture “E.Maiorana”, Erice, 28 August 2015, plenary talk
- Variational Analysis and Applications, International Center for Scientific Culture “E.Maiorana”, Erice, 30 August 2015, plenary talk
- PACM Colloquium, Princeton University, 21 September 2015
- University of Pisa, Ceremony for Galileo Galilei international prize for science, 3 October 2015
- Panorama of Mathematics, Hausdorff Center for Mathematics, University of Bonn, 21-23 October 2015, plenary speaker  
<https://www.youtube.com/watch?v=FxyO52aEuvM&index=10&list=PLul8LCT3AJqQPdcscz9NZy4581-dmfgW>
- Applied Math Days, Budapest University of Technology and Economics, 26 October 2015
- Mathematical Modeling Seminar, Budapest University of Technology and Economics, 27 October 2015

- 3rd International Workshop on RB, POD and PGD Model Reduction Techniques, ENS Cachan, 4-6 November 2015, keynote speaker, <http://rom2015.sciencesconf.org/>
- Exploratory Workshop on Applications of MOR in Industrial Research and Development, Luxembourg City, 6 November 2015, keynote speaker, <http://www.eu-mor.net/event/3477/>

## 2016

- BIMoS Distinguished Lecture, TU Berlin, 11 January 2016  
<http://www.bimos.tu-berlin.de/index.php/20-academics/27-distinguished-lectures>
- IRMA Colloquium, Université de Strasbourg, 5 February 2016
- EPFL Life Science Faculty Retreat, Invited talk, 8 February 2016
- ETH D-BSSE Seminar, 8 March 2016, Basel (CH)
- 14th Annual United Arab Emirates Math Day, Abu Dhabi, March 12<sup>th</sup>, 2016, plenary talk (cancelled due to flight cancellation)
- Diderot Mathematical Forum, Politecnico di Milano – UPMC Paris – Universidad Complutense Madrid, plenary talk, March 15, 2016
- ENEmath, IST Lisbon, keynote lecturer, March 19, 2016
- IBM Research Center, Zurich: invited seminar, April 13, 2016
- MUSE – Museo delle Scienze di Trento, public lecture, May 23, 2016
- National Congress of Swiss Surgeons, Lugano, 1-3 June 2016, invited talk
- ECCOMAS 2016, plenary lecture, Crete 6-10 June 2016
- ICOSAHOM 2016, Rio de Janeiro, keynote talk, 27 June 2016
- Conference on Valve Related Disorders, Cambridge, 23-25 July 2016, invited speaker
- Flow and Transport in permeable Media, Gordon Research Conference, Girona, Spain, 1-5 August 2016, invited speaker
- Nek5000 Workshop, M.I.T., Cambridge, 10-12 August 2016, invited speaker
- ESB-ITA Conference, Palermo, 8-9 September 2016, invited speaker
- SIMAI 2016 Conference, Milan, 13-16 September 2016, plenary speaker  
<https://www.youtube.com/watch?v=Cr3O-b0mDy4>
- NMPDEs 2016, Institut Henri Poincaré, Paris, 24 October 2016, invited speaker
- CIMPA School on Mathematical Models in Biology and Medicine, Mauritius Island, 12 December 2016, invited speaker

## 2017

- Linné FLOW Center Lecture 2017, KTH Stockholm, 12 January 2017
- DDXXIV, International Conference on Domain Decomposition Methods, Svalbard, Norway, 6-10 February 2017, plenary lecture
- International Conference on Mathematical and Numerical Modelling of the Cardiovascular System and Applications, University of Pavia, 22 February 2017, invited speaker (celebrating the 70<sup>th</sup> birthday of P. Colli-Franzone)
- Seminari di Cultura Matematica, Politecnico di Milano, invited speaker (opening lecture), March 15, 2017
- University of Genova, minicourse at ISSUGE (Institute for Advanced Studies), 25 March 2017
- CMBE17, Opening plenary lecture, Pittsburgh, 10 April 2017  
<http://www.compbioed.net/2017/invited-speakers.htm>
- Euler-Vorlesung 2017 (The Euler Lecture 2017), Potsdam, Berlin, 19 May 2017 <http://www.euler-lecture.berlin/>
- University of Naples Federico II, 5 June 2017, invited speaker
- Distinguished PDE Lecture Series, Lecturer 2017, Vienna Center for Partial Differential Equations, Vienna, 6 June 2017  
<http://viennapde.tuwien.ac.at/events/pdelectures.html>
- ECCOMAS Conference on Coupled Problems, Rhodes Island, 12-14 June 2017, opening plenary lecture
- Math Summer School 2017, 4 September 2017, Opening lecture, San Pellegrino Terme (Italy)
- ACOMEN 2017, Ghent (Belgium), 18-20 September 2017, plenary lecture

- Colloquium, Institute of Mathematics Universitat de Barcelona, 18 October 2017
- Honorary Lecture, EPFL, 6 December 2017  
<https://memento.epfl.ch/event/prof-alfio-quarteroni-taking-mathematics-to-heart/>

## 2018

- Athenaeum, LUISS International School, Rome, 8 January 2018
- Biomechanics Seminar Series, Université Paris-Saclay, 25 January 2018
- Colloquium, Department of Mathematics, University of Maryland, 2 February 2018
- Keynote lecture, World Leading Research Centers - Materials Science and Spintronics, Tohoku University, Sendai, Japan, 19 February 2018
- University of Tokyo, Komaba Campus, 21 February 2018
- The Keith Stewartson Memorial Lecture, BAMC 2018, St Andrews, Scotland, 26 March 2018
- Public Conference, Chiostro del Comune di Gioia del Colle, Italy, 7 April 2018
- Doctoral School of Politecnico di Milano, Mathematics and Philosophy in Medicina, 10 May 2018
- Università Federico II, Naples, short course in Numerical Methods for PDEs, 11 May 2018
- Università di Perugia, Colloqui di divulgazione scientifica, 25 May 2018
- Emoclinic Symposium, Cardiologia Ieri, Oggi, Domani, keynote lecture, Novara, June 8, 2018
- Management of Heart Failure: current challenges and future perspectives, invited lecture, ISMETT - Palermo, June 9, 2018
- Mathematical Institute Colloquia, University of Oxford, 15 June 2018
- VPH Summer School, Barcelona, keynote lecture, 21 June 2018  
[https://www.upf.edu/web/bcnvph\\_school](https://www.upf.edu/web/bcnvph_school)
- VPH 2018 Zaragoza, Spain, 5-7 September 2018 <http://vph-conference.org/program/keynote-speakers/>
- The Marker Lecture Series, Penn State University, 22-24 October 2018, College Station, PA,  
<https://math.psu.edu/events/seminar/384>
- Mathesis2018, University of Milan, 17 November 2018, keynote speaker
- Pedro Nunes Lectures 2018, Coimbra-Lisbon-Porto, 21-23 November 2018,  
<http://www.cim.pt/agenda/event/196>
- Colloquium in Mathematical Engineering, Three Lectures on Numerical Models for Multiphysics, Naples, Università Federico II, 4-7 December 2018  
[http://www.scuolapsb.unina.it/downloads/materiale/allegati/Corso\\_Quarteroni.pdf](http://www.scuolapsb.unina.it/downloads/materiale/allegati/Corso_Quarteroni.pdf)

## 2019

- Niguarda Hospital, Milan, Italy, 24 January 2019, invited seminar
- Cardiolucca 2019 Conference, Lucca, Italy, 8 February 2019, invited presentation
- I Lincei per la Scuola, Cagliari, Italy, 15 February 2019, invited presentation
- SIAM Geosciences 2019, Houston, TX, plenary lecture, March 11, 2019
- Applied Mathematics Seminar, UC Berkeley / Lawrence Berkeley Laboratory, March 14, 2019
- Istituto Lombardo Accademia di Scienze e Lettere, Milano, 4 April 2019
- Università di Bari (Italy), invited seminar, 2 May 2019
- University of Graz, Austria, BioTecMed Flagship Lecture 2019, 15 May 2019  
<https://biotechmedgraz.at/en/news/detail/article/flagship-lecture-15052019-prof-alfio-quarteroni/>
- ETNA25, Santa Margherita di Pula, Italy, 26 May 2019, invited speaker
- Isaac Newton Institute, Cambridge, UK, 4 June 2019, Industrial and Clinical Application of Cardiac Simulations: Quantifying Uncertainty in Model Prediction, invited speaker  
<https://gateway.newton.ac.uk/event/ofbw45/programme>
- Soft Tissue Modelling Workshop, University of Glasgow, 5-7 June 2019, invited speaker  
[http://www.softmech.org/events/headline\\_587639\\_en.html](http://www.softmech.org/events/headline_587639_en.html)
- Ha-Lu 2019 International Conference, GSSI-L'Aquila, 17-21 June 2019, invited speaker  
<https://indico.gssi.it/event/8/>
- TogetherVT, International Conference in Cardiology for Ventricular Tachycardia, San Raffaele Hospital, Milan, 27-28 June 2019, invited speaker
- SIMAI30, International Conference for the 30<sup>th</sup> birthday of SIMAI, Milan, 1-2 July 2019, invited speaker
- ICIAM 2019, invited lecture in minisymposium, Valencia, Spain, 16 July 2019

- Vienna Doctoral School of Mathematics, Weissensee, Austria, 23-27 September 2019, lecturer
- International Conference “The Future of Medicine Starts Now”, Genova, 27 September, invited speaker
- International Conference “Multiscale Modeling in Fluid Mechanics and Fluid-Structure Interaction”, Vilnius, Lithuania, invited speaker, 7 October 2019
- Mathesis Annual Conference 2019, Matera, Italy, 25 October 2019, invited speaker
- Festival della Scienza, Genova, 26 October 2019, invited speaker
- Mathematics Colloquium, Scuola Normale Superiore, Pisa, Italy, 30 October 2019
- MUSE (Museo della Scienza), Trento (Italy), iHeart@MUSE day, 5 November 2019
- HEARTLINE 2019, Genova (Italy) 15 November 2019, plenary lecturer

## 2020

- Accademia dei Lincei, Rome, 10 January 2020, invited lecture
- PhD Lectures at GSSI (Gran Sasso Science Institute), L'Aquila, Italy, 15-17 January 2020
- LIFD Annual Lecture 2020, Leeds Institute of Fluid Dynamics, 10 February 2020
- MUST (Museum of Science and Technology), Milan, 15 February 2020, invited presentation
- East China Normal University, Shanghai, Webinar, 15 July 2020
- OneWorld Numerical Analysis Seminar, opening seminar, 20 July 2020,  
[https://www.icms.org.uk/V\\_OWNumAnal.php](https://www.icms.org.uk/V_OWNumAnal.php)
- [https://media.ed.ac.uk/media/Alfio+Quarteroni+20+July+The+mathematical+heartA+a+computational+model+for+the+simulation+of+the+heart+function/1\\_md5i3z4a](https://media.ed.ac.uk/media/Alfio+Quarteroni+20+July+The+mathematical+heartA+a+computational+model+for+the+simulation+of+the+heart+function/1_md5i3z4a)
- ESOF 2020, Trieste, online seminar with T.Corno on Integrated Heart
- ESOF 2020, Trieste, online presentation at AROMA-CFD event
- BEMACS Lecture 2020, Università Bocconi, Milan, 7 October 2020
- Festival della Scienza 2020, Genova, invited lecture, 24 October 2020
- University of Florence, 50th Birthday of the Engineering Faculty, keynote lecture, 9 October 2020  
<https://www.ingegneria.unifi.it/upload/sub/50esimoScuola-9-10-2020.pdf>
- EAMBES 2020 Fellows Presentation, Online meeting, December 1, 2020

## 2021 (all seminars online)

- LLNL (Lawrence Livermore National Laboratory) Seminar, UC Berkeley, January 27, 2021
- PhD graduate school in Applied Mathematics, 6 lectures, University of Padova, 8 February 2021
- Scuola Belleville di Scrittura Creativa, 2-hour seminar, Milan, February 27, 2021
- Indian Institute of Technology, Kanpur, India, plenary lecture, March 19, 2021
- Istituto Lombardo Accademia di Scienze e Lettere, keynote lecture, March 25, 2021
- The University of Western Australia, Perth, analysis seminar, April 14, 2021
- Festival di Scienza e Filosofia, Foligno, Italy, April 23, 2021, keynote presentation
- The Sneddon Lecture 2021, The University of Glasgow, 4 May 2021
- SSM (Scuola Superiore Meridionale) Colloquium, University of Naples, 20 May 2021
- 8ECM (European Congress of Mathematics), Opening Plenary Lecture, Portoroz, Slovenia, 21 June 2021
- Management of Cardiovascular Diseases: A Look at the Present and a Glance into the Future, Online Conference, 24-26 June 2021, invited lecture
- INDAM Workshop on Analysis and Numerics of Design, Control and Inverse Problems, invited lecture, 3 July 2021
- Seminar, Dipartimento di Matematica, Università di Bari, Bari (Italy), 8 July 2021 (in presence)
- « Il Libro Possibile » Book Festival, public conference, Polignano (Italy), 8 July 2021 (in presence)
- Festival dell'Ingegneria, Politecnico di Milano, public conference, 11 September 2021 (in presence)
- ZAG Day 2021, CRS4, Cagliari (Sardinia), keynote lecture, 13 September 2021
- Riemann Week, M. Morandini Foundation, public conference, 20 September 2021 (in presence)
- One Day in PDEs, Politecnico di Milano, keynote speaker, 1 October 2021 (in presence)
- Food and Science Festival, Mantova, 3 October 2021

- Università di Roma La Sapienza, Rome, 15 October 2021, Colloquium (in presence)
- I Venerdi della Scienza, Liceo Respighi, Piacenza, Italy, 22 October 2021(in presence)
- Festival della Scienza, Genova, 23 October 2021 (in presence)
- Novelties in Cardiovascular Medicine, Turin, Italy, invited lecture, 4 November 2021 (in presence)
- Mathesis Bergamo, Italy, 5 November 2021(in presence)
- New Bridges Between Mathematics and Data Science, International Symposium, Valladolid, Spain, plenary talk, 9 November 2021(in presence)
- Math Colloquium, University of Parma, Italy, 24 November 2021 (in presence)
- Biology and Technology, A 2-day workshop, Cagliari, Italy, 4-5 December 2021 (in presence)

## 2022

- 50<sup>th</sup> anniversary of Università Cattolica, Brescia (Italy), keynote lecture, 9 February 2022
- Math Colloquium, NYU-ABU DHABI, 14 February 2022
- Università Bocconi, Milan, OrientaMat, 25 February 2022
- Math Colloquium, Dipartimento Ulisse Dini, Università di Firenze, 31 March 2022
- Lincei per la Scuola, Scuola Normale Superiore, Pisa, Italy, 25 March and April 1st, 2022
- Conferenza Medici Pediatri Provincia di Piacenza, Italy, 9 April 2022
- Circolo dei Lettori di Torino, Turin, Italy, May 05, 2022
- Humanitas University, Milan, Conference in Cardiology, May 14, 2022
- Master Class, Procter&Gamble, Frankfurt, Germany, May 31<sup>st</sup>, 2022 (online)
- University of Evora, Portugal, July 5, 2022, plenary speaker
- BioToMath International Conference, Turin, September 6-8, 2022, invited speaker

## 2023

- Assyr Abdulle's Memorial, EPFL, Lausanne, February 2, 2023, invited speaker
- Masterclass @ MindTheValue, Milan, March 8, 2023
- Keynote lecture @ HSR (San Raffaele University Hospital) retreat, Stresa, March 9, 2023
- Sibe Mardesic Colloquium, Department of Mathematics, University of Zagreb, Slovenia, March 22, 2023 (online)
- The David Gottlieb Memorial Lecturship on Scientific Computing 2023, Brown University, April 3, 2023 (online)
- AI Week, Rimini (Italy), April 20, 2023, plenary speaker
- 22nd IACM Computational Fluids Conference CFC2023, Cannes, France, April 26, 2023, opening plenary speaker
- Unitre Lodi, May 25, 2023
- Department of Mathematics, University of Genoa, Italy, invited seminar, May 26, 2023
- First MaLGa Colloquium, Aula Magna University of Genoa, Italy, May 26, 2023
- M2P Eccomas Conference, Taormina, Italy, May 31, 2023, invited presentation
- FAU MoD Lecture, Friedrich-Alexander Universitat, Erlangen, Germany, July 6, 2023 (online)
- Seminario de EDP e Matematica Aplicada, Brasil, July 12, 2023 (online)  
<https://www.youtube.com/watch?v=8Zbiczi71Vs&t=739s>
- Lagrange Lecture 2023, ICIAM2023 Conference, Tokyo, Japan, August 24, 2023
- FMfI2023, Fukuoka, Japan, August 29, 2023, invited presentation (online)
- UMI 23 (Congresso Nazionale dell'Unione Matematica Italiana), Pisa, Public Lecture September 8, 2023
- XLVIII Summer School on Mathematical Physics, 6 lectures, Ravello, Italy, 11-16 September 2023
- Prato (Italy), Sincronie 6, September 13, 2023, invited lecture (online)
- Ordine degli Ingegneri, Bergamo (Italy), September 27, 2023, short course on AI
- Notte dei Ricercatori, Università degli Studi di Brescia, Public Lecture, September 29, 2023
- Università di Urbino (Italy), Math Colloquium, October 3, 2023
- Wired for Innovation, Prysmian Lecture, Milan, October 17, 2023
- Incontri di Cardiologia 2023, Crotone (Italy), October 20, 2023, invited lecture
- CANUTO23, Politecnico di Torino, November 2, 2023, invited presentation
- INDAM Colloquium 2023, Istituto Nazionale di Alta Matematica, Rome, November 9, 2023
- Liceo Cantonale di Bellinzona, Switzerland, November 13, 2023
- The Legacy of Enrico Magenes, Pavia, November 21, 2023, invited lecture

- Korea Biomedical Math Research Center, Colloquium, Seoul, November 22, 2023 (online)
- Abbott master course in Electrophysiology, December 4, 2023 (online)

## 2024

- Workshop on “Mathematics for Artificial Intelligence and Machine Learning”, Bocconi University, Milan, January 17, 2024, plenary speaker
- Africomp 2024, Cape Town, South Africa, February 26, 2024, plenary speaker
- Workshop “Insight into Aortic Diseases”, 4<sup>th</sup> Edition, Milan, invited speaker, March 15, 2024
- PhD Lecture Series, Brin Mathematics Research Center, University of Maryland, March – May 2024
- IIT (Italian Institute of Technology), seminar, April 12, 2024 (online)
- Oden Institute Distinguished Lecture, University of Texas at Austin, April 29, 2024
- CMAI Colloquium, George Mason University, Washington DC, 10 May 2024
- ELIXIRxNextGenIT, Milano Bicocca University, 24 June 2024
- Assolombarda AI workshop, Milan, 24 June 2024
- CIME Summer School on PDEs, Control and Deep Learning, July 21-25, 2024, Cetraro, Italy, 5 Lectures
- AIMETA 2024, University of Naples, Opening Plenary Lecture, 3 September 2024
- University of Jyväskylä, Finland, memorial Yuri Kuznetsov, invited lecture, 26 September 2024, online
- Piteco Innovation Day, Milan, keynote lecture, 26 September 2024
- The Piola lecture 2024, University of Pavia, Italy, 1 October 2024
- The 3<sup>rd</sup> Reval Lecture 2024, ENI, Milan, 2 October 2024
- Accademia dei Lincei, Lettura Corsiniana (public lecture), Rome, 6 October 2024
- Lecons Jacques Louis Lions 2024, Paris Sorbonne Université, 14-17 October 2024
- Colloquium at Jacques-Louis Lions Laboratory, Paris Sorbonne Université, 18 October 2024
- AI Forum, Tavagnacco – Udine (Italy), 19 October 2024
- Lectio Magistralis, Opening of the Genova Science Festival, Genua, Italy, 24 October 2024
- Colloquium at Istituto Superior Tecnico IST Lisbon, 28 October 2024
- Collegio Ghislieri, Pavia, Public Lecture, 12 November 2024
- University of Brescia, Faculty of Engineering, Colloquium, 28 November 2024
- Accademia dei Lincei, Conferenza Istituzionale, Rome, 13 December 2024

## 2025

- CIME70, 70 years of C.I.M.E., University of Florence, keynote lecture, 11 January 2025
- DSABNS 2025, 16th Dynamical Systems applied on Biology and Natural Sciences, Naples, public lecture, 20 January 2025
- SISSA Colloquium, 12 February 2025, Trieste (Italy)  
<https://www.youtube.com/watch?v=eu5aIBDFL38>
- Georgia Tech, invited seminar, 17 April 2025
- Emory University, invited seminar, 18 April 2025
- Babuska Forum, Oden Institute of Computational Engineering and Science, UT Austin, 25 April 2025
- International Conference on Machine Learning Methods for Complex and Quantum Systems (ML2025), opening plenary lecture, University of Camerino (Italy), 4-6 June 2025
- School of Advanced Studies Sant’Anna, Pisa (Italy), 5 June 2025
- The Biorobotics Institute, Pontedera (Italy), 6 June 2025
- 7<sup>th</sup> SoftMech Workshop, Politecnico di Milano, 12 June 2025, public lecture
- AIT Austrian Institute of Technology, distinguished lecture, Vienna, 30 June 2025
- 20<sup>th</sup> OpenFoam Workshop, Vienna, July 1st 2025, opening plenary lecture
- Opening Conference for Mathematical Challenges in Brain Mechanics, Norwegian Academy of Science and Letters, Oslo, 20-22 August 2025
- The Göran Gustafsson Lectures in Mathematics 2025, KTH, Stockholm, 9,10,11 September 2025

- 11<sup>th</sup> Summer School on “Physics-informed modeling, simulation and experiments with emphasis on the cardiovascular system”, Graz University of Technology, lecture series, september 15-19 2025 (6 lectures)
- WIRED Next Festival 2025, Rovereto (Italy), 5 October 2025
- SIPMeL National Congress, Riva del Garda (Italy), plenary lecture, 6 October 2025
- SISSA mathLab Jubilee, Trieste, Italy, invited lecture, 29 October 2025
- Mathematics Colloquium, Levi-Civita Mathematics Department, University of Padua, 6 November 2025
- Mathesis, opening plenary lecture, Vicenza (Italy), 4 December 2025

## 2026

- Lecture series on « Mathematics in Society’s Transformation », Goethe University, Frankfurt, 13 January 2026
- Dean’s Lecture, KAUST, Saudi Arabia, 25 January 2026
- Mathematical and Data Science Symposium, plenary lecture, KAUST, Saudi Arabia, 28 January 2026

## Teaching

- University of Pavia: Course on "Mathematical Analysis" faculty of engineering, from 1981 to 1984; Course on "Statistics and Applications", faculty of medicine, from 1982 to 1984
- University of Minnesota at Minneapolis (U.S.A.): Ph.D. Course on "Numerical methods for partial differential equations", fall quarter 1984.
- University of Brescia, Faculty of Mathematical Sciences: Course on "Numerical Analysis" from 1982 to 1989; Course on "Mathematical Analysis" from 1985 to 1989; Course on "Functional Analysis" from 1989 to 1992
- Politecnico di Milano: Course on "Numerical Analysis" from 1989 to 2019
- Politecnico di Milano: Course on "Numerical Methods in Engineering", from 1992 to 2014
- Politecnico di Milano, Course on “Numerical Analysis of PDEs”, 2004 to 2022
- University of Minnesota, Minneapolis, School of Mathematics: Ph.D. topic course on Numerical Analysis, 3 quarters, academic year 1990-91
- Ecole Polytechnique Fédérale de Lausanne: Course on "Mathematical Modelling of Cardiovascular Flows", Winter Semester 1998, 1999, 2000, 2002
- Ecole Polytechnique Fédérale de Lausanne: Course on "Domain Decomposition Methods for Partial Differential Equations", Winter Semester 2001
- Ecole Polytechnique Fédérale de Lausanne: Course on "Scientific Computing", Master in Mathematical Engineering - Winter Semester from 1998 to 2004
- Ecole Polytechnique Fédérale de Lausanne: Courses on "Numerical Analysis “ Spring and Winter Semester from 1998 to 2017 (to virtually all the engineering branches at EPFL)
- Ecole Polytechnique Fédérale de Lausanne: Course on "Numerical Analysis of Partial Differential Equations", winter semester, from 1999 to 2017
- PostDoc (Continuing Education) Classes at Mox, Politecnico di Milano on Computational Fluid Dynamics and Finite Elements Method, from 2003 to 2022
- Master course “Numerical Methods for Partial Differential Equations”, HPC branch, Politecnico di Milano, from 2022 to date
- An (almost) unlimited number of courses and tutorials given at summer schools all around the World.
- University of Maryland at College Park, Spring 2024: Topic course: Digital models, scientific machine learning, and digital twins

## LIST of PUBLICATIONS

### B. Books (author)

- B1 - C. Canuto, M. Y. Hussaini, A. Quarteroni and T. A. Zang, **Spectral Methods in Fluid Dynamics**, Springer-Verlag, New York, 1988, (557 p.)
- B2 - A. Quarteroni and A. Valli, **Numerical Approximation of Partial Differential Equations**, Springer-Verlag, Heidelberg, 1994, SCM Series n. 23. (543 p.)
- B3 - A. Quarteroni, **Elementi di Calcolo Numerico**, Esculapio, Bologna, 1994 (in Italian) (181 p.)
- B4 - A. Quarteroni, R. Sacco and F. Saleri, **Matematica Numerica**, Springer-Verlag Italia, Milan, 1998; second edition, 2003 (in Italian) (440 p.); third edition, 2008 (509 p.); fourth edition, 2014 (529 p.) (authors: A. Quarteroni, R. Sacco, F. Saleri and P. Gervasio).
- B5 - A. Quarteroni and A. Valli, **Domain Decomposition Methods for Partial Differential Equations**, Oxford University Press, Oxford, 1999, (360 p.)
- B6 - A. Quarteroni, R. Sacco and F. Saleri, **Numerical Mathematics**, Springer-Verlag New-York, 2000, TAM Series n. 37, (655 p.); second edition, 2007 (655 p.)
- B6a - A. Quarteroni, R. Sacco and F. Saleri, **Numerische Mathematik I, II** Springer-Verlag, Berlin and Heidelberg, 2002 (in German) (367 p. + 328 p.) (translation by L. Tobiska)
- B6b - A. Quarteroni, R. Sacco and F. Saleri, **Méthodes Numériques pour le Calcul Scientifique**, Springer-France, Paris, 2000 (in French) (444 p.) (Translation by J.F. Gerbeau)
- B7 - A. Quarteroni, **Modellistica Numerica per Problemi Differenziali**, Springer-Verlag Italia, Milan, 2000 (in Italian) (290 p.); second edition, 2003 (330 p.); third edition, 2006 (451 p.); fourth edition, 2008 (561 p.); fifth edition, 2012 (630 p.); sixth edition, 2016 (xix + 651 p.)
- B8 - A. Quarteroni and F. Saleri, **Introduzione al Calcolo Scientifico. Esercizi e Problemi Risolti con MATLAB e Octave**, Springer-Verlag Italia, Milan (in Italian). First edition, 2001 (219 p.), second edition, 2004; third edition, 2006 (306p.), fourth edition, 2008 (358p.).
- B9 - A. Quarteroni, F. Saleri and P. Gervasio, **Calcolo Scientifico. Esercizi e Problemi Risolti con MATLAB e Octave**, Springer-Verlag Italia, Milan (in Italian). 5th edition, 2012 (450 p.)
- B10 - A. Quarteroni and F. Saleri, **Scientific Computing with MATLAB and Octave**, Springer-Verlag Heidelberg, 2003 (257 p.); second edition, 2006 (318 p.)
- B10a - A. Quarteroni and F. Saleri, **Calcul scientifique. Cours exercices corrigés et illustrations en Matlab et Octave**, Springer, 2006. (in French) (319p.) (Translation by J.F. Gerbeau)
- B10b - A. Quarteroni and F. Saleri, **Cálculo Científico com MATLAB e Octave**, Springer, 2007. (in Portuguese) (320 p.) (translation by A. Sequeira)
- B10c - A. Quarteroni and F. Saleri, **Cálculo Científico con MATLAB y Octave**, Springer, 2006. (in Spanish) (329 p.) (translation by R. Bermudez)
- B10d - A. Quarteroni and F. Saleri, **Wissenschaftliches Rechnen mit MATLAB**, Springer, 2005 (in German) (269 p.) (Translation by K. Sappelza)
- B11 - C. Canuto, M. Y. Hussaini, A. Quarteroni and T. A. Zang, **Spectral Methods: Fundamentals in Single Domains**, Springer, 2006. (563 p.)
- B12 - C. Canuto, M. Y. Hussaini, A. Quarteroni and T. A. Zang, **Spectral Methods: Evolution to Complex Geometries and Applications to Fluid Dynamics**, Springer, 2007. (625 p.)
- B13 - A. Quarteroni, **Numerical Models of Differential Problems**, Springer Series MS&A, Vol 2, 2009 (602 p.); 2nd edition, Springer Series MS&A, Vol 8, 2014 (656p.); 3rd edition, Springer Series MS&A, Vol 16, 2017 (xvii+681p.);

B14 -A. Quarteroni, F. Saleri and P. Gervasio, **Scientific Computing with MATLAB and Octave**, Springer-Verlag Heidelberg, 2010, third edition (360 p.); 2014 fourth edition (442 p.)

B14a – A. Quarteroni, F. Saleri and P. Gervasio, **Calcul scientifique. Cours exercices corrigés et illustrations en Matlab et Octave**, Springer-Milan, 2010 (in French) (365p.)

B14b - A. Quarteroni, F. Saleri and P. Gervasio, **Scientific Computing with MATLAB and Octave**, Maruzen Publishing Co. (Tokyo) 2014 fourth edition (502 p.) – in Japanese- (Translation by Takashi Kako)

B15 - C.D’Angelo and A. Quarteroni, **Matematica Numerica. Esercizi, Laboratori e Progetti**, Springer Series Unitext, Milan, 2009 (in Italian) (349 p.)

B15a - A. Quarteroni, **Matematica Numerica. Esercizi, Laboratori e Progetti**, Springer Series Unitext, Vol 75, Milan, 2nd edition, 2013 (in Italian) (406 p.)

B16 – A. Quarteroni, A. Manzoni and F. Negri, **Reduced Basis Method for Partial Differential Equations. An Introduction**. Springer Series Unitext, Vol.92, Milan, 2015 (296p.)

B17 – A. Quarteroni, L. Dede’, A. Manzoni and C. Vergara, **Mathematical Modelling of the Human Cardiovascular System**. Data, Numerical Approximation, Clinical Applications. Cambridge University Press, 2019

B18 – A. Quarteroni and P. Gervasio, **I delfini delle Eolie, i battiti del cuore, i motori di ricerca – Modelli matematici per comprendere, simulare, esplorare**, Zanichelli, 2019 (235p., in Italian)

B19 – A. Quarteroni and P. Gervasio, **A Primer on Mathematical Modelling**, Springer Series Unitext Vol. 121, 2020

B20 – A. Quarteroni, **Le equazioni del cuore, della pioggia e delle vele**, Zanichelli, Chiavi di Lettura, 2020 (in Italian)

B21 – A. Manzoni, A. Quarteroni, and S. Salsa, **Optimal Control Problems for Partial Differential Equations: Analysis, Approximation, Applications**. Springer AMS, New York, 2021 (498 p.)

B22 –A. Quarteroni, **Algoritmi per un Nuovo Mondo**, Le Grandi Voci, Dedalo, 2021 (in Italian)

B23– A. Quarteroni, **Modelling Reality with Mathematics**, Springer, 2022; German Translation: **Modellieren der Realitat mit Mathematik**, Springer, 2024.

B24 –A. Quarteroni, **Algorithms for a New World**, Springer, 2022

B25 – A. Quarteroni, **L’Intelligenza Creata**. L’AI e il nostro futuro, Hoepli, 2025 (in Italian)

B26 – A. Quarteroni, **Artificial Intelligence**. Unveiling the Truth Beyond the Myths, Springer-Nature, Copernicus Series, 2025

#### **E. Books (editor)**

E1 - C. Canuto and A. Quarteroni, Eds., **Spectral and High Order Methods for Partial Differential Equations**, Elsevier, North Holland, Amsterdam, 1990.

E2 - A. Quarteroni, J. Periaux, Y. A. Kuznetsov and O. B. Widlund, Eds., **Domain Decomposition Methods in Science and Engineering**, AMS, Providence, RI, 1994. (485 p.)

E3 - A. Quarteroni, Ed., **Advanced Numerical Methods for Hyperbolic Equations**, LNM, Springer-Verlag, Heidelberg, 1998. (450 p.)

- E4 - A. Quarteroni, L. Formaggia and A. Veneziani, Eds., **Complex Systems in Biomedicine**, Springer Italia, 2006 (292 p.)
- E5 - L. Formaggia, A. Quarteroni and A. Veneziani, Eds., **Cardiovascular Mathematics. Modeling and Simulation of the Circulatory System**, Springer Series MS&A, Vol 1, 2009
- E6 - M. Emmer and A. Quarteroni, Eds., **MATHKNOW**, Springer Series MS&A Vol 3 2009 (264 p.)
- E7 - D. Ambrosi, A. Quarteroni and G. Rozza, Eds., **Modelling Physiological Flows**, Springer Series MS&A, Vol 5, 2011 (240p.)
- E8 - A. Quarteroni and G. Rozza, Eds., **Reduced Order Methods for Modeling and Computational Reduction**, Springer Series MS&A, Vol 9, 2014 (334p.)
- E9 - A. Quarteroni, Ed., **Modeling the Heart and the Circulatory System**, Springer Series MS&A, Vol 14, 2015 (236p.)
- E10 - P. Benner, S. Grivet-Talocia, A. Quarteroni, G. Rozza, W. Schilders, L.M. Silveira, Eds., **Model Order Reduction**, Vol I: System and Data-Driven Methods and Algorithms, De Gruyter, 2020 (in press)
- E11 - P. Benner, S. Grivet-Talocia, A. Quarteroni, G. Rozza, W. Schilders, L.M. Silveira, Eds., **Model Order Reduction**, Vol II: Snapshot-Based Methods and Algorithms, De Gruyter, 2020
- E12 - P. Benner, S. Grivet-Talocia, A. Quarteroni, G. Rozza, W. Schilders, L.M. Silveira, Eds., **Model Order Reduction**, Vol III: Applications, De Gruyter, 2020
- E13 - L. Ambrosio and A. Quarteroni, Eds., **Conversations on Optimal Transport**, Springer Nature, 2023

#### J. Refereed Journals Publications

(black=printed, green=in press, blue=submitted)

- J1 - A. Quarteroni, "Primal hybrid finite element methods for fourth order elliptic equations", **Calcolo XVI** (1979), pp.21-59
- J2 - A. Quarteroni, "Error estimates for the assumed stresses hybrid methods in the approximation of fourth order elliptic equations", **R.A.I.R.O. An. Num.** **13** (1979), pp.355-367
- J3 - F. Brezzi, L. D. Marini, A. Quarteroni and P. A. Raviart, "On an equilibrium finite element method for plate bending problems", **Calcolo XVII** (1980), pp.271-291
- J4 - A. Quarteroni, "Hybrid finite element methods for the Von Karman equations" **Calcolo XVI** (1979), pp.271-288
- J5 - A. Quarteroni and A. Visintin, "On the numerical solution of a nonlinear variational equation related to a filtration problem", **Boll. U.M.I.** (5) 17-B (1980), pp.204-231
- J6 - A. Quarteroni, "On mixed methods for fourth order problems", **Comp. Meths. Appl. Mech. Engrg.** **24** (1980), pp.13-34
- J7 - A. Quarteroni, "Mixed approximation of evolution problems", **Comp. Meths. Appl. Mech. Engrg.** **24** (1980), pp.137-163
- J8 - C. Canuto and A. Quarteroni, "Propriétés d'approximations dans les espaces de Sobolev de systemes de polynomes orthogonaux", **C.R.Acad.Sci.Paris** **290-A** (1980), pp.925-928

- J9 - C. Canuto and A. Quarteroni, "Approximation Results for Orthogonal Polynomials in Sobolev Spaces", **Math. Comput.** **38** (1982), pp.67-86
- J10 - A. Quarteroni, "Some results of Bernstein and Jackson type for polynomial approximation in  $L^p$  spaces", **Japan Journal of Applied Math.** **1** (1984), pp.173-181
- J11 - C. Canuto and A. Quarteroni, "Spectral and Pseudospectral Methods for Parabolic Problems with Non Periodic Boundary Conditions", **Calcolo** **23** (1981), pp.197-217
- J12 - C. Canuto and A. Quarteroni, "Error Estimates for Spectral and Pseudospectral Approximations of Hyperbolic Equations", **SIAM J. Numer. Anal.** **19** (1982), pp.629-642
- J13 - C. Canuto and A. Quarteroni, "Spectral Methods for Hyperbolic Equations", **Rend. Sem. Mat. Univers. Politecn. Torino** **39** (1981), pp.21-31
- J14 - Y. Maday and A. Quarteroni, "Approximation de l'equation de Burgers stationnaire par des methodes spectrales", **C.R. Acad. Sci. Paris** **293-I** (1981), pp.143-146
- J15 - Y. Maday and A. Quarteroni, "Approximation of Burgers' equation by pseudo-spectral methods", **R.A.I.R.O. An. Num.** **16** (1982), pp.375-404
- J16 - Y. Maday and A. Quarteroni, "Legendre and Chebyshev spectral approximations of Burgers' equation", **Numer. Math.** **37** (1981), pp.321-332
- J17 - Y. Maday and A. Quarteroni, "Spectral and pseudo-spectral approximations of Navier-Stokes equations", **SIAM J. Numer. Anal.** **19** (1982), pp.761-780
- J18 - C. Canuto, Y. Maday and A. Quarteroni, "Analysis of the Combined Finite Element and Fourier Interpolation", **Numer. Math.** **39** (1982), pp.205-220
- J19 - C. Canuto, H. Fujii and A. Quarteroni, "Approximation of Symmetry Breaking Bifurcations for the Rayleigh Convection Problem", **SIAM J. Numer. Anal.** **20** pp.873-884 (1983), pp.873-884
- J20 - C. Canuto, Y. Maday and A. Quarteroni, "Combined Finite Element and Spectral Approximation of the Navier-Stokes Equations", **Numer. Math.** **44** (1984), pp.201-217
- J21 - C. Canuto and A. Quarteroni, "Preconditioned Minimal Residual Methods for Chebyshev Spectral Calculations", **J. Comput. Phys.** **60** (1985), pp.315-337
- J22 - V. Battarra, C. Canuto and A. Quarteroni, "A Chebyshev Spectral Method for Gas Transients in Pipelines", **Comp. Meth. Appl. Mech. Engrg.** **48** (1985), pp.329-352
- J23 - A. Quarteroni, "Blending Fourier and Chebyshev Interpolation", **J. Approx. Theory** **51** (1987), pp.115-126
- J24 - N. Bressan and A. Quarteroni, "Analysis of Chebyshev Collocation Methods for Parabolic Equations", **SIAM J. Numer. Anal.** **23** (1986), pp.1138-1154
- J25 - N. Bressan and A. Quarteroni, "An Implicit/Explicit Spectral Method for Burgers' Equation", **Calcolo** **XXIII** (1987), pp.265-284
- J26 - C. Canuto and A. Quarteroni, "On the Boundary Treatment in Spectral Methods for Hyperbolic Systems", **J. Comput. Phys.** **71** (1987), pp.100-110
- J27 - A. Quarteroni, "Fourier spectral methods for pseudoparabolic equations", **SIAM J. Numer. Anal.**, **24** (1987), pp.323-335
- J28 - D. Funaro, A. Quarteroni and P. Zanolli, "An iterative procedure with interface relaxation for domain decomposition methods", **SIAM J. Numer. Anal.** **25** (6), (1988), pp.1213-1236

- J29 - Y. Maday and A. Quarteroni, "Error Analysis for Spectral Approximations to the Korteweg de Vries Equation", **MMAN** **22** (1988), pp.539-569.
- J30 - A. Quarteroni, "Domain Decomposition Techniques Using Spectral Methods", **Calcolo** **XXIV** (1987), pp.141-177
- J31 - F. Pasquarelli, A. Quarteroni and G. Sacchi-Landriani, "Spectral Approximations of the Stokes Problem by Divergence Free Functions", **J. Scientific Comput.** **2** , (1987), pp.195-226
- J32 - L. D. Marini and A. Quarteroni, "A Relaxation Procedure for Domain Decomposition Methods Using Finite Elements", **Numer. Math.** **55**, (1989), pp.575-598
- J33 - A. Quarteroni and G. Sacchi-Landriani, "Domain Decomposition Preconditioners for the Spectral Collocation Method", **J. Scientific Comput.** **3** (1), (1988), pp.45-75
- J34 - A. Quarteroni and G. Sacchi-Landriani, "Parallel Algorithms for the Capacitance Matrix Method in Domain Decompositions", **Calcolo** **25** (1-2) (1988), pp.75-102
- J35 - F. Gastaldi and A. Quarteroni, "On the Coupling of Hyperbolic and Parabolic Systems: Analytical and Numerical Approach", **Applied Numerical Mathematics** **6** (1989), pp.3-31
- J36 - A. Quarteroni, "Domain Decomposition Methods for Systems of Conservation Laws: Spectral Collocation Approximations", **SIAM J. Sci. Stat. Comput.**, **11** (6), (1990), pp.1029-1052
- J37 - A. Quarteroni, G. Sacchi Landriani and A. Valli, "Coupling of viscous and inviscid Stokes equations via a domain decomposition method for finite elements", **Numer. Math.**, **59** (1991), pp. 831-859
- J38 - A. Quarteroni, " Domain Decomposition Method and Parallel Processing for the Numerical Solution of Partial Differential Equations", **Surveys on Mathematics for Industry** **1**(1991) , pp.75-118
- J39 - A. Quarteroni and E. Zampieri, "Finite Element Preconditioning for Legendre Spectral Collocation Approximations to Elliptic Systems and Equations", **S.I.A.M. J. Numer. Anal.** **29**, (1992), pp. 917-936
- J40 - L. Avaldi, A. Quarteroni and F. Saleri, "Finite Element Simulation of Electron Optical Systems", **Math. Models and Meth. in Applied Sciences**, **2**, (1992), pp. 339-356
- J41 - A. Cividini, A. Quarteroni and E. Zampieri, "Numerical Solution of Linear Elastic Problem by Spectral Collocation Methods", **Comp. Meth. Appl. Mech. Engrng.** **104**, (1993). pp. 49-76
- J42 - A. Frati, F. Pasquarelli and A. Quarteroni, "Spectral Approximation to Advection-Diffusion Problems by the Fictitious Interface Method", **J. Comput. Physics** **107**, (1993), pp. 201-212
- J43 - V. I. Agoshkov, D. Ambrosi, V. Pennati, A. Quarteroni, F. Saleri, Mathematical and Numerical Modelling of Shallow Water Flow, **Computational Mechanics**, **11**, (1993), pp. 280-299
- J44 - A. Quarteroni, Metodi Numerici in Fluidodinamica, **Boll. U.M.I.** (7) **6-A**, (1992), pp. 157-180
- J45 - F. Pasquarelli, A. Quarteroni, Effective Spectral Approximation to Convection- Diffusion Equations, **Comput. Methods Appl. Mech. Engrg.**, 116, 1994, pp.39-51
- J46 - S. Micheletti, A. Quarteroni and R. Sacco, Current-Voltage Characteristics Simulation at Semiconductor Devices Using Domain Decomposition, **J. Comput. Phys.**, 119, (1995), pp. 46-61
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