

Ezio Venturino - VITA

1 Brief Summary

- **Present Position:** Professor of Mathematics, Dipartimento di Matematica, Università di Torino, via Carlo Alberto 10, 10123 Torino, Italy.
email: ezio.venturino@unito.it
- **Birthplace and date:** Savona, Italy; March 24, 1954.
- **Citizenship:** Italian.
- **Education:**
 1. Laurea in Matematica, Università di Torino, Italy, on 7/7/77 with honors.
 2. M. Sc. in Applied Mathematics, SUNY at Stony Brook, on 12/23/81.
 3. Ph. D. in Applied Mathematics, SUNY at Stony Brook, on 12/21/84.
Dissertation title: An analysis of some direct methods for the numerical solution of singular integral equations, advisor Professor R.P.Srivastav.
- **Languages known.** Good-Fluent: Italian, English, French, German; Elementary-Intermediate: Russian, Spanish and Portuguese.
- **Research Interests:** In *numerical analysis*: quadrature formulae for singular integrals, methods for singular integral equations, lacunary interpolation problems. In *mathematical modelling*: biological and socioeconomic applications.
- **Professional activities:** Coauthored a book for CRC and coedited two other ones for Birkhäuser and Springer.

Authored about *forty research papers* in numerical analysis and more than *twohundred* in mathematical modelling.

Taken part in more than *twohundredfifty international conferences*. Main organizer of a few of them; also numerous plenary talks given upon invitation, contributor of a paper to almost all events, regular organizer of special sessions, chairman of sessions and performed other organizational work. Referee for international Journals.

Teaching experience in: calculus, linear algebra, combinatorics, numerical analysis, complex variables and applications, mathematical models,

ordinary and partial differential equations, linear and nonlinear optimization techniques, operations research, numerical solution of singular integral equations, finite elements, finite differences for parabolic and hyperbolic partial differential equations, applied functional analysis, integral equations, numerical solution of ordinary and algebraic differential equations, numerical methods for elliptic partial differential equations, mathematical biology. Developed a "hands on the computer" course in numerical analysis.

1.1 Contribution to publications

1. **Associate Editor** of the **Electronic Proceedings** of WSEAS Conference on Mathematics and Computers in Biology and Chemistry 2004 (MCBC 2004), Venice, Nov. 15-17, 2004.
2. **Guest Editor** for the **WSEAS Transactions on Biology and Biomedicine** vol. 1, n. 4, October 2004.
3. Area Editor, Simulation Theory and Practice, Elsevier, 2008-2013.
4. Advisory Editor, Mathematical Methods in the Applied Sciences, Wiley, since 2009.
5. Associate Editor of the Proceedings CMMSE 2008, La Manga del Mar Menor, Spain, June 12th-16th, 2008.
6. Associate Editor of the Proceedings CMMSE 2009, Gijón, Asturias, Spain, June 30th - July 3rd, 2009.
7. Co-Editor of the Proceedings DWCAA 2009, Canazei, 4-9/9/2009
8. Advisory Editor (2010-2017), Associate Editor (2018-) of Journal of Biological Systems (World Scientific).
9. Associate Editor of the Proceedings CMMSE 2010, Almeria, Spain, June 27th-30th, 2010.
10. Associate Editor of the Proceedings CMMSE 2011, Benidorm, Spain, June 26th-30th, 2011.
11. Associate Editor of the Proceedings CMMSE 2012, La Manga del Mar Menor, Spain, July 2nd-5th, 2012.
12. Associate Editor of the Proceedings CMMSE 2013, Almeria, Spain, June 24th-27th, 2013.

13. Associate Editor of the Proceedings CMMSE 2014, Rota (Cadiz), Spain, July 3rd-7th, 2014.
14. Associate Editor of Contemporary Mathematics and Statistics, Columbia International Publishing, ISSN: 2163-1204 (Online) since 2012.
15. Editorial Board of Rendiconti del Seminario Matematico dell'Università e del Politecnico di Torino.
16. Editorial Board for Heliyon, Elsevier's open access journal, 2015-19
17. Member of the BIOMAT Consortium Director Board, since 2015
18. Member of Editorial Board in our conference proceeding on "Modern Mathematical Methods and High Performance Computing in Science & Technology (M3HPCST-2015)" on December 27-29,2015, Raj Kumar Goel Institute of Technology(RKGIT),Gaziabad in Utter Pradesh, India, which may likely to be published by Springer-Verlag.
19. Chief Editor, Collana "Mathematical and Computational Biology and Numerical Analysis", Aracne editrice, Roma, since 2105.
20. Associate Editor of the Proceedings of the 17th International Conference on Mathematical Methods in Science and Engineering - Costa Ballena, Rota (Cadiz), Spain, July 4rd-8th, 2017.
21. Editor, Computational and Mathematical Methods (Wiley) since its start in 2018.
22. Member of the Board of Advisors of the International Conference on "Mathematical Modeling and Computing" (ICMMC 2018), Jaipur Engineering College and Research Centre, Jaipur, India, 6th -7th April 2018.
23. Current Trends in Dynamical Systems in Biology and Natural Sciences", Maira Aguiar, Carlos Braumann, Bob Kooi, Andrea Pugliese, Nico Stollenwerk, Ezio Venturino (Editors) Springer-SIMAI series, 2020.
24. Advisor for the Editorial Board of Journal of Biological Systems, since 2018.
25. Member of the Editorial Board of MATCOM (Mathematics and Computers in Simulations), since 2019.

26. Member of the Editorial board of International Journal of Applied and Computational Mathematics (Springer) since 2020.
27. Member of the Editorial board of AIMS Mathematics since 2020. <http://www.aimspress.com>
<https://www.aimspress.com/news/203.html>
28. Member of the Editorial board of Mathematical Biosciences and Engineering (MBE) since 2020.
29. Co-editor with Higinio Ramos of the Special Issue entitled “Models and Mathematical Methods for fighting Infectious Diseases and easing their impact on society” for MBE.
30. Nicolas Bacaër, with Bruno Felice Filippo Flora, and with the e con la partecipazione di Yvan Castin, Vincenzo Capasso, Mimmo Iannelli, Elisa Affili, Bruno Buonomo, Alessandro Margheri, Chiara Poletto, Luca Rossi, Ezio Venturino: Una breve storia matematica della dinamica delle popolazioni, Titre original : Histoires de mathématiques et de populations ©Cassini, Paris, 2008 Pour l’édition italienne : ©Nicolas Bacaër, 2021 ISBN : Dépôt légal : mai 2021

1.2 Positions held

- High school teacher (1977); Instructor in the Politecnico of Torino, Italy (1978); Researcher in the CEMOTER, Politecnico di Torino, Italy, with a grant of the Italian Research Council (CNR) (1979), graduate student in the Department of Applied Mathematics and Statistics, SUNY at Stony Brook, initially with another grant of the CNR (1980-1983), and then teaching assistant (1983-84), Visiting Assistant Professor in the Department of Applied Mathematics and Statistics, SUNY at Stony Brook (1984); Research Collaborator, in the Medical Department of the Brookhaven National Laboratory (1984-85); Lecturer, University of Torino, Italy (1985);
Visiting Assistant (1986-88), then Assistant (1989-1992) and Associate Professor (1993-1997), Mathematics Department, the University of Iowa;
Visiting Researcher, University of Adelaide, Australia (1995); Visiting Researcher, University of Tasmania, Australia (1995); Visiting Associate Professor, University of Leeds, UK (1996); Visiting Researcher, University of Huddersfield, UK (1996); Associate Professor, University of Catania (various periods, 1986-1997); Associate Professor, Politechnic of Torino (1997-2001).

1.3 Shorter visits to other Institutions

- MIT, Cambridge, Massachusetts, 1982. Cornell University, Ithaca, NY, 1982. University of California, Berkeley, CA, 1984. Stanford University, Stanford, CA, 1984. University of Copenhagen, Denmark, 1989. Technical University of Lyngby, Denmark, 1989. University of Wisconsin at Milwaukee, 1989 and 1991. Pennsylvania State University, USA, 1990. University of Minnesota, Minneapolis, MN, USA, 1991. University of Manitoba, Winnipeg, Manitoba, Canada, 1994. University of Waterloo, Ontario, Canada, 1995. University of New South Wales, Sydney, Australia, 1995. State University of Kansas, Manhattan, KS, 1996. University of Manchester, UK, 1996 and 1997. University of Weimar, Germany, 1997. University of Freiberg, Germany, 1997. University of Oslo, Norway, 1998. University of Cork, Ireland, 1999. Queens University of Belfast, UK, 2000. University of Delft, Holland, 2000. University of Twente, Holland, 2000. University of Osnabrueck, Germany, 2000. University of Innsbruck, Austria, 2002. Technical University of Vienna, Austria, 2002. University of Oporto, Portugal, 2003. Universitat de Girona, Spain, 2003. University of Osnabrueck, Germany, 2003. University of Huddersfield, UK, 2004. University of Bradford, UK, 2004. University of Bonn, Germany, 2004 and 2005. University of Eichstaet, Germany, 2005. Universidad de Valladolid, Spain, 2005. Technische Universität Bergakademie Freiberg, Germany, 2005. Universität Innsbruck, Austria, 2005. Universität Bonn, Germany, 2006. Universität Osnabrueck, Germany, 2006. Universität Oldenburg, Germany, 2006. Technical University of Crete, Chania, Greece, 2006, Gast Wissenschaftler, Max Planck Institut Komplexer Systeme, Dresden, August-September 2011.

1.4 Invited talks

University of Pavia, Italy, July 1985. Istituto per le Applicazioni della Matematica, Naples, Italy, January 1986 (2 talks). Iowa State SIAM Meeting, University of Iowa, Iowa City, Iowa, April 1986. University of Camerino, Italy, July 1987. Università di Catania, Italy, May 1989. Matematisk Institut, Kobenhavn Universitet, Denmark, April 1989. University of Wisconsin at Milwaukee, October 1989. University of Wisconsin at Milwaukee, April 1991. Polytechnic of Milano, Italy, February 1993. University of Queensland, St. Lucia, Australia, October 1995. University of Tasmania, Hobart, Australia, December 1995. University of Messina, Italy, February 1997. University of Innsbruck, Austria, July 2002. Universitat de Girona, Spain, Septem-

ber 2003. University of Torino, June 2004. Bio.Ma. 2005, Third cycle of conferences in marine biology, University of Torino, April 2005. Universidad de Valladolid, Spain, May 2005. Technische Universität Bergakademie Freiberg, Germany, July 2005. Technical University of Crete, Chania, September 2006. Università' del Piemonte Orientale, Novara, February 2007, University of São Paulo, campus of São Carlos, Brasil 2 talks in July 2007, University of Tartu, Estonia, November 25th 2010, 2 talks, of 120 and 90 minutes, Technische Universität Bergakademie Freiberg, Germany, September 28th, 2011. Federal University of São Paulo (UNESP), 2 weeks (2015), in São Paulo and Botucatu. UFRJ, Rio de Janeiro, August 26th, 2015; Benares Hindu University, Varanasi, India, November 10th, 2015; Visva Bharati Univ., Santiniketan, WB, India, November 23rd and 24th, 2015: two seminars; IIT Kanpur, Kanpur, India, November 30th, 2015; Public Health Foundation of India, Delhi, December 2nd, 2015; R.K. Goel Institute of Technology, Ghaziabad, UP, India, December 4th, 2015; 10 hours advanced course given at Translational Health Science and Technology Institute, Delhi, December 1st-7th, 2015; also one seminar; Instituto Politécnico de Bragança, Portugal, January 29th, 2016; Beijing Normal University, October 28th, 2016; Universidade do Minho, Guimaraes, February 10th, 2017; Instituto Superior Técnico, Lisboa, February 16th, 2017. Università di Genova, June 16th, 2017. University of Western Cape, Capetown, South Africa, September 1st, 2017. University of Cape Town, South Africa, September 20th, 2017. Stellenbosch University, Capetown, South Africa, September 22nd, 2017. Université de Besançon, France, September 27th, 2017. Pushchino, Russia, October 27th, 2017. University of Naples, December 5th, 2017. University of Helsinki, Finland, December 13th, 2017. University of Bologna, Department of Physics, Italy, February 12th, 2019. IANUA-ISSUGE, Scuola Superiore dell'Università di Genova (Superior School, University of Genoa, Italy), May 4th, 2019. University of Malaga, Spain, "On the spreading of communicable diseases in farming environments". Università della Calabria, Cosenza, 12/7/2019. University of Guelph, Canada, "Examples of biological control exerted by insects and fungi", July 2019. University of York, Canada, "Epidemiological models for disease propagation in a farm", July 2019. University of Liverpool, UK, invited web seminar for the series (inaugural talk): "North West Mathematical Biology and Data Science Seminars - Autumn 2020"; title "Mathematical models for fighting alien species invasions in Italy", September 23rd, 2020. University of Linköping, Sweden. Universidad Tecnológica Estadal Metropolitana, Santiago del Chile, August 1st, 2022. Universidad Católica del Maule, Talca (Chile), Inauguración Año Académico del programa de doctorato "Modelamiento Matemático Aplicado", DM₂A August 11th, 2022. Universidad Tecnológica Estadal Metropolitana, Santiago del

Chile, Cursillos 1-5, August 2nd, 2022 Université de Franche-Comté, Besançon, September 12th, 2022 (in French)

1.5 Recognitions

- CMMSE 2013 prize: <https://cmmse.usal.es/cmmse2023/schedule-and-prize>
- Ranked among the top 2% of world scientists for the years 2017, 2019, 2020, 2021 by Mendeley Data:
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/1/files/ea67b825-40c4-4851-8488-2476b4b2dcc5> (2017) 103759 out of 106369
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/2/files/dd0904a8-0eba-4cf3-be4a-c6092261fed5> (2019) 63695 out of 161442
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3/files/b3e31af2-054c-4b3a-b9c5-6fd9bf10557a> (2020) 61166 out of 190064
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4/files/458f56f3-72b3-4a3b-a179-93d9c931a51f> (2021) 82526 out of 200410
- August 2021 data-update for "Updated science-wide author databases of standardized citation indicators" - Elsevier BV (digitalcommonsdata.com), lists of career and year
- Fractal & Fractional has included the paper: Youcef Belgaid, Mohamed Helal, Abdelkader Lakmeche, Ezio Venturino, A mathematical study of a Corona virus model with the Caputo fractional-order derivative, special issue "Fractal Functions and Applications" of Fractal Fract. 2021, 5, 87 in the "Editor's Choice" list
https://www.mdpi.com/journal/fractalfract/editors_choice

1.6 Grants

- Winner of several grants of CNR (Italian National Research Council) in the years 1977-1983.
- Winner of one of two 1983 summer supports for graduate students, offered by Dept. of Appl. Math. and Stats., SUNY at Stony Brook.
- NSF grant #ATM-9312263, Numerical Analyses for Plasma Instabilities and Transport in the Magnetotail; co-principal investigator with C. Grabbe.

- Local coordinator of the Numerical Analysis group, grant of MURST (Department of University and Scientific and Technological Research), for the years 1994-97.
- European Training Fundation - IMG 2004 (with Russia).
- Department of Foreign Affairs (Italy): Program of Scientific and Cultural Collaboration, local Italian coordinator of supported projects with Georgia and India, 2004-2007.
- Department of University and Research (MIUR - Italy): winner of two postdoctoral positions for Indian students.
- CRUI-DAAD Vigoni program 2006-07.
- Project WWS: postdoc grant for 12 months for Brasil, 2008: 3 invitations made, two for 4 months, and one for 3 months.
- CRUI-DAAD Vigoni program 2009-10.
- Regione Piemonte: mathematical research investigation of an epidemic in hog farms in the region, 2009.
- Project of the University of Torino for 2009/2010: winner of one postdoctoral position for an Indian student.
- Bilateral agreements under the Erasmus project opened in various years: Universita' de Porto, Portugal, Universidad de Valladolid, Spain, University of Bradford, UK, University of Swansea, UK, Universitaet Osnabrueck, Germany, Technische Universitaet Freiberg, Germany, Universitaet Innsbruck, Austria, Technische Universitaet Wien, Austria, Polytechnio Kritis, Chania, Greece. Anadolou University, Turkey. ES-IEE, Noisy, France. Universidad de Alcalá, Spain.