Gianluca Vinti

Curriculum Vitae

Personal Information

Gianluca Vinti, born in Rome, on January 24, 1964. Address: Via del Coppetta 6, CAP 06124, Perugia, Italy. Nationality: Italian.

Academic career and positions:

1986	Degree in Mathematics
1986	Winner of two grants at the CNR (National Counsil of Research), and another at the INdAM (Istituto Nazionale di Alta Matematica Francesco Severi-National Institute of Higher Mathematics Francesco Severi)
1991	Researcher at the Faculty of Engineering of the University of Perugia (Italy)
1992	Associate professor at the Faculty of Engineering of the University of Palermo (Italy)
1993-2001	Associate professor at the Faculty of Engineering of the University of Perugia (Italy)
2001 -	Full professor of Mathematical Analysis at the Faculty of Engineering of the University of Perugia (Italy)
2003 - 2005	Coordinator of the "Biennium" at the Faculty of Engineering of the University of Perugia (Italy)
2005 - 2013	Director of the Department of Mathematics and Computer Science of the University of Perugia (Italy)
2006 -	Member of the Scientific Committee of the Unione Matematica Italiana (Italian Mathematical Union) for the periods 2006-2008, 2009-2011, 2012-2014, 2015-2017, 2018-2020, 2021-2023.
2010 -2014	President of the "Permanent Conference of the Directors and the Secretaries of the Departments and Centers with budgetary autonomy" (Conferenza Permanente dei Direttori e dei Segretari dei Dipartimenti e dei Centri con autonomia di bilancio) of the University of Perugia
2013 -2021	Designated by the Board of the INdAM as member of the "Scientific Council of the GNAMPA" (National Group for the Mathematical Analysis, the Probability and their Applications) and subsequently elected.
2013 -	Referent for the Mathematics of the Educational Centre of the "Accademia Nazionale dei Lincei" at Perugia

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2013 -	Member of the Academic Board of the Ph.D. in Mathematics, Computer Science, Statistics organized in consortium (C.I.A.F.M.) among the University of Perugia (Italy), University of Florence (Italy) and the INdAM
2014 - 2019	Director of the "Department of Mathematics and Computer Science" of the University of Perugia, according to the Italian law 240
2014 -2019	Member of the Academic Senate of the University of Perugia
2014 -2019	Member of the "Research Commission" and the "Resources Commission" of the Senate of the University of Perugia
2016-2019	Member of the Regional Technical Table on the Digital Agenda
2017-2018	coordinator of the University project PRO3 project - action B2 and B3
2019-	Director of Lamberto Cesari Interdepartmental Research Center
2021-	Coordinator of the UMI commission "Scientific Meetings"

Other positions:

2001 – 2013	Delegate for "orientation" of the Faculty of Engineering of the University of Perugia and for the "Erasmus project",
2003–2013	Member of the Academic Board of the Ph.D. in "Mathematics and Computer Science for Processing and the Representation of the Information and the Knowledge"
2008–2013	Member of the "Election Board" of the Faculty of Engineering of the University of Perugia

Teaching activities relating to the academic year - 2022-2023:

He currently teaches at the University of Perugia, in the following courses: Mathematical Analysis for the degree in Civil Engineering (9 CFU), Mathematical Analysis for degree course in Computer Science and Electronic Engineering (8 CFU), Approximation Theory (9 CFU) and Applied Image and Signal Processing (6 CFU) for the Master degree courses in Mathematics and in Computer Sciences .

Editorial activities:

Member of the Editorial Board of the following international scientific journals: Dolomites Research Notes on Approximation, Open Mathematics, Sampling Theory, Signal Processing, and Data Analysis (STSD), Mathematical Foundation of Computing, Open Signal Processing, General Mathematics, Demonstratio Mathematica, and many others. Reviewer for the American Mathematical Society, and of several scientific journals with an international Editorial Board.

Other organizational activities and associations:

He has organized several conferences and workshop and has been the President of the Organizing Committee of the Joint International Meeting Italian Union of Mathematics - Deutsche Mathematiker Vereinigung (UMI-DMV) that was held in Perugia, from 18 to 22 June, 2007. Founding member of the "Inter-Study Center Lamberto Cesari ". He also organized the session "SIAM Minisymposium on Multivariate Signal Analysis and Inverse Problems", for the Congress of the American Mathematical Society (AMS), which was held at San Antonio (USA) in January 2015, and the "Mathematical Image Processing" session in the Congress GAMM2015 - 86th Annual Meeting of the International

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Association of Applied Mathematics and Mechanics, which was held in Lecce (Italy), in March 2015. In June 2016, he has been one of the organizers of the GNAMPA Congress held in Montecatini Terme (Italy), of the session "Real Analysis and Functional Inequalities" (together with Paolo Salani) at the XXI UMI Congress, Pavia 2-7 September 2019 and in January 2020 of the international conference MATA2020 held in Perugia from 16 to 18 January 2020. Member of the scientific committee of the Congress "Dante and the quadrivium of Sciences" (Celebrations for the 700th anniversary of the death of Dante Alighieri), Sapienza University of Rome, April 14, 2021, Rome, organizer (with C. Bardaro, P. Pucci and A.R.Sambucini) of the "Day in memory of Domenico Candeloro ", 10 May 2021, online and with F. dell'Accio, S. De Marchi, C. Conti and M. Campiti, of the First Day of UMI-TAA Working Group, May 14, 2021, online. Organizer (with A. Acu, L. Bialas-Ciez, S. De Marchi) of the Minisymposium: "Approximation Theory and Applications "(MS-ID78), 20-26 June 2021, Portoroz (Slovenia) and with U. Gianazza, M.R. Lancia, P. Marcellini, of the Advanced in Evolution Equations and Applications (for the 61,8 birthday of Prof. V. Vespri), 24-25 September 2021, Pavia. He has also organized the activities of the Polo dei Lincei from 2013 till today, section of Perugia (as responsible) and, as coordinator of the UMI Scientific Colloquium Commission and from 2021 of the Scientific Meetings Commission, organizator of many scientific events held in 2019-2020-2021 and of the whole program of the UMI Scientific Meetings from 2022 till 2024.

Coordination of Project activities:

He has been the coordinator of the following research projects:

1. GNAMPA-INdAM project 2005: "Approximations by integral operators and applications to Signal Processing" (Approssimazione con operatori integrali e Applicazioni al Signal Processing).
2. Project FIXO-Azione 2006: "Management and Processing of Biomedical Images", in collaboration among the following Italian university: Camerino, Perugia, Siena, Sassari, and the following companies: the Hospital of Perugia, ASUR Marche, research center INRCA of Ancona (Italy), Medicad s.r.l-spin-off of the University of Palermo (Italy). The main purpose of the above project was the formation of a new professional in the field of the analysis and the processing of biomedical images. As part of this project, we have enabled an intense collaboration with the sections of Vascular and Endo-vascular Surgery and Diagnostic and Interventional Radiology of the University of Perugia.
3. GNAMPA INdAM project 2007: "Approximation by intyegral and discrete operators and applications to discontinuous signal theory (BV or in Orlicz spaces) and in semi-group theory" (Approssimazione con operatori integrali e discreti ed applicazioni alla teoria dei segnali discontinui (BV o in Spazi di Orlicz) ed alla teoria dei semigruppi).
4. 2008 - Project funded by the "Fondazione Cassa di Risparmio di Perugia": "Methods of the mathematical analysis and discrete geometry with applications to the treatment of signals and images, to optical systems, and to cryptography" (Metodi dell'Analisi Matematica e della Geometria Discreta e applicazioni al trattamento di segnali e di immagini, a sistemi di comunicazione ottica e alla crittografia).
5. 2009 - Project funded by the "Fondazione Cassa di Risparmio di Perugia": "Mathematical and computer science methods for the applications to the mathematical economics, to Mathematical Physics , to the networks for the communications and the artificial intelligence" (Metodi Matematici e Informatici con applicazioni all'Economia Matematica, alla Fisica Matematica, alle Reti per la gestione delle comunicazioni e all'Intelligenza Artificiale).
6. 2010 - Project funded by the "Fondazione Cassa di Risparmio di Perugia": "Theory and methods for the Mathematical Analysis, the geometry and the Computer science for the management of

the information" (Teoria e Metodi dell'Analisi Matematica, della Geometria e dell'Informatica per la gestione dell'Informazione).
7. PON project 2011: "Models and techniques of approximation for the social network analysis".
8. GNAMPA INdAM project 2012: "Methods of operators theory for problems of approximations and evolution equations and their applications" (Metodi di Teoria degli Operatori per Problemi di Approssimazione e per Equazioni di Evoluzione e loro Applicazioni).
9. National coordinator of the PRIN2012: "Methods of operators theory for approximation problems and applications" (Metodi di teoria degli operatori per problemi di approssimazione ed applicazioni). The project has passed the pre-selection phase, but it was declared not eligible for funding.
10. European project MIMA: Mathematics in the Making (Project Manager) - Lifelong Learning Program of the European Union Project n. 539872 - LLP - 1 - 2013 - IT - COMENIUS - CMP Agreement n. 2013 - 3073 / 001 - 001; lead unit: University of Perugia.
11. Cassa di Risparmio di Perugia 2015 Foundation Project co-financed by the title: "Algorithms for the improvement of thermographic images for the study of the influence of thermal bridges in the energy analysis of buildings".
12. Cassa di Risparmio di Perugia 2017 Project co-financed by the title: "Mathematical algorithms for improving acoustic images obtained from industrial sources with beamforming technique ".
13. Cassa di Risparmio di Perugia 2018 Project co-financed by the title: " Methods and Processes of Artificial Intelligence for the development of a bank of medical images for diagnostic purposes - B.I.M. ".
14. CARE Project: "A regional information system for Heart Failure and Vascular Disorder", PRJ Project - 1507 Action 2.3.1 POR FESR 2014-2020, 2020 (project departmental coordinator).
15. Fondazione Cassa di Risparmio di Perugia 2019 Project co-financed by the title: "Imaging methods non-invasive using sequential OCT angiography for the study of degenerative retinopathies in the elderly" (M.I.R.A.)
16. Member of the European project: Innovation, digitalisation and sustainability for the diffused economy in Central Italy - VITALITY (2022) - Spoke 9. Nanostructured materials and devices and Spoke 10. Bio based and biocompatible materials and devices.
17. He has also coordinated several departmental research projects and has participated to several national research projects PRIN approved for financing, in collaboration with other Italian universities in the field of Real Analysis, in several research projects of CNR, bilateral projects Italy-Germany and Italy - Marocco, who provided scientific exchanges between researchers. Moreover, he is the coordinator of a bilateral agreement of scientific cooperation between the University of Perugia and the Adam Mickiewicz University in Poznan (Poland). He is also coordinator of several Erasmus mobility agreements, both for teachers and students (staff and student mobility).
18. Coordinator of an agreement between the Department of Mathematics and Computer Science and Neulos s.r.l., of one between the Department of Mathematics and Computer Science and the Neural Research and another between the Department of Mathematics and Computer Science and the Department of Surgical and Biomedical Sciences (now Department of Medicine and Surgery).

Project Evaluation Activities:

- He belongs to the register of scientific experts of MIUR D.D. n. 79/2010 / Rec. and adheres to the register of auditors of MIUR;
- Evaluator of regional research projects
- Referee and Rapporteur of MUR SIR projects.

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- Evaluator of FISR projects and member of the MUR evaluation panel.
- Evaluator of FRG projects of American University of Sharjah, United Arab Emirates.
- Evaluator of FRA 2022 projects of the University of Naples Federico II, Italy.

Member/President of the commissions of the following competitions:

1) Member of the commission for the admission and the awarding of the title of the Ph.D. in Mathematics (University of Florence, University of Pisa, University of Salento (Lecce), University of Padova);
2) President of the commission for the admission and the awarding of the title of the Ph.D. in Mathematics, Informatic, Statistic (University of Florence,University of Perugia and INdAM-admission, University of Napoli-awarding of the title);
3) Member of the commission for university researcher with fixed-term contract (RTD a) and B)) - Napoli Federico II, La Sapienza University of Rome, Napoli Parthenope, Perugia, etc.;
4) Member of the commission for the competition to University Researcher (University of Messina, University of Torino, and University of Perugia);
5) Member of the commission for associate professor (Salerno, Catania, Napoli Federico II, Napoli Parthenope, etc.).
3) Member of several commission for the competition to Full professor (Palermo, etc.);
4) President of the commission for competitions to grants and Post-doc positions.

Scientific activities:

At the local level he coordinates a research group, consisting of 2 Full Professors, 5 Associate Professor , 2 Assistant Professors , 1 Post doc student, 4 PHD Students, which deals with Real Analysis, Functional Analysis, Approximation Theory and its applications to Signal/Image Processing with reference to biomedical images (CT images) for the diagnosis of vascular pathologies, (AOCT images) for the diagnosis of retinopathies, (RNM images) for the diagnosis of Alzheimer's disease, for resolution improvement in the kidney segmentation and tumour classification problem and image diagnostics for the study of the seismic vulnerability of buildings (texture of images), for the evaluation of their energy efficiency (study of thermal bridges) and for the study and localization of acoustic sources (acoustic bridges). Some of the mentioned topics are developed in collaboration with the Departments of Civil and Environmental Engineering (DICA), Engineering (DI), Medicine and Surgery and with the Perugia Hospital (sections of Radiology and Health Physics). Responsible for research grants and scholarships. He was invited to hold about 90 plenary conferences at conferences and seminars at various universities and centers of research, including: Aachen (Germany), Bedlewo (Poland), Czestochowa (Poland), Koln (Germany), Kraków (Poland), Madrid (Spain), Orleans (France), Poznan (Poland), S. Francisco (USA), Toronto (Canada), Thessaloniki (Greece), Trondheim (Norway), York (U.K.) and Sibiu (Romania), in addition to the major Italian universities (Florence, Palermo, Trento, Roma Tre, Naples, Salerno, Bari, Cosenza, Potenza, Lecce, Cassino, Udine, Taormina, Catania, Messina, etc.) and has held numerous communications at national and international congresses and conferences. He has held courses for the PhD in Mathematics of the University of Florence (in consortium with the University of Perugia) and for the PhD in Mathematics and Computer Science for Processing and Representation of Information and Knowledge at the University of Perugia.

Periods of research carried out abroad:

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He has been invited for research periods at several foreiner universities, among which: RWTH-Aachen- Germany (1991, 1993, 2005), A. Mickiewicz University (UAM) in Poznan, Poland (1994, 1998, 1999), University of York, UK (2001,2002,2004,2006), University of Konya, Turkey (2019), Isaac Newton Institute, Cambridge (2019), Sibiu University, Romania (2022).

Indicators of scientific activity:

- SCOPUS: h-index 30, 2015 citations;
- WOS: h-index 26, 1394 citations;
- MathScinet: h-index 22, 1403 citations;
- Google Scholar: h-index 36, 3697 citations, i10 index 91.

Publications:

He is author of 170 scientific publications that appeared or are being printed in journals with an international editorial board (in two of which he is a book editor), author of the scientific monograph: C. Bardaro-J-Musielak-G. Vinti, "Nonlinear Integral Operators and Applications", De Gruyter Series in Nonlinear Analysis and Applications, De Gruyter, Berlin-New York, 2003 and author of some educational publications.

Scientific Publications:

1. C.BARDARO-G.VINTI "Perimetro e variazione generalizzata rispetto ad una misura in $\mathbb{R}^2$, Atti Sem. Mat. Fis. Univ. Modena, 35 (1987), 173-190.
2. C.BARDARO-G.VINTI "Integral operators on vector measures and applications to the moment kernel", Rendiconti di Matematica, 8, (1988), 149-164.
3. C.BARDARO-G.VINTI "Modular convergence in generalized Orlicz spaces for moment type operators", Applicable Analysis, 32, (1989), 265-276.
4. C.BARDARO-G.VINTI "Some estimates of integral operators in fractional calculus", Rapporto Tecnico N. 8/1989 del Dipartimento di Matematica - Università degli Studi di Perugia.
5. G.VINTI "Soluzioni periodiche di sistemi non lineari di Liénard con termini forzanti", Rendiconti del Circolo Matematico di Palermo, Serie II, Tomo XXXIX, (1990), 5-46.
6. C.BARDARO-G.VINTI "On approximation properties of certain non convolution integral operators", Journal of Approximation Theory, Vol. 62, No. 3 (1990), 358-371.
7. C.BARDARO-G.VINTI "On convergence of moment operators with respect to the -variation", Applicable Analysis, Vol 41 (1991), 247-256.
8. C.BARDARO-G.VINTI "Modular estimates of integral operators with homogeneous kernels in Orlicz type spaces", Results in Mathematics, Vol 19 (1991), 46-53.
9. C.BARDARO-G.VINTI "Some estimates of integral operators with respect to the multidimensional Vitali -variation and applications in fractional calculus", Rendiconti di Matematica di Roma, Serie VII, Vol 11 (1991), 405-416.
10. C.BARDARO-G.VINTI "Some estimates of certain integral operators in generalized fractional Orlicz classes", Numerical Functional Analysis and Optimization, 12 (1991), 443-453.
11. G.VINTI "The Fubini-Tonelli integral in the sense of Weierstrass-Cesari over pairs of BV curves", Nonlinear Analysis, Vol 18, No 2 (1992), 121-142.
12. C.BARDARO-G.VINTI "A General Convergence Theorem with respect to Cesari Variation and

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Applications", Nonlinear Analysis, Vol 22 (1994), 505-518.

13. C.BARDARO-G.VINTI "Modular Convergence Theorems in Fractional Musielak-Orlicz Spaces", Zeitschrift für Analysis und ihre Anwendungen (Journal for Analysis and its Applications), Vol 13 (1994), No. 1, 155-170.
14. G.VINTI "The Generalized φ-Variation in the sense of Vitali: Estimates for Integral Operators and Applications in Fractional Calculus", Commentationes Mathematicae, 34 (1994), 199-213.
15. C.BARDARO-J.MUSIELAK-G.VINTI "Modular estimates and modular convergence for a class of nonlinear operators", Mathematica Japonica, Vol 39, No. 1, (1994), 7-14.
16. C.BARDARO - J.MUSIELAK - G.VINTI "On Absolute Continuity of a Modular connected with Strong Summability", Commentationes Mathematicae, 34 (1994), 21-33.
17. C.BARDARO-G.VINTI "Some Inclusion Theorems for Orlicz and Musielak-Orlicz Type Spaces", Annali di Matematica Pura e Applicata, 168 (1995), 189-203.
18. C.BARDARO-G.VINTI "Modular estimates for linear integral operators in Musielak-Orlicz spaces on groups", Atti Sem. Mat. Fis. Modena, 43 (1995), 483-490.
19. C.BARDARO-G.VINTI "Modular Approximation by Nonlinear Integral Operators on Locally Compact Groups", Commentationes Mathematicae, 35 (1995), 25-47.
20. C.BARDARO-G.VINTI "Modular Estimates and Modular Convergence for Linear Integral Operators", Contemporary Mathematics, 190 (1995), 95-105.
21. C.BARDARO - J.MUSIELAK - G.VINTI "Approximation by Nonlinear Integral Operators in some Modular Function Spaces", Annales Polonici Math., 53 (1996), 173-182.
22. I.MANTELLINI - G.VINTI "Modular Estimates for Nonlinear Integral Operators and Applications in Fractional Calculus", Numerical Functional Analysis and Optimization, 17 (1996), 143-165.
23. C.BARDARO - J.MUSIELAK - G.VINTI "On the definition and properties of a general modulus of continuity in some functional spaces", Mathematica Japonica, 43 (1996), 445-450.
24. C.BARDARO - J.MUSIELAK - G.VINTI "Nonlinear operators of integral type in some function spaces", Collectanea Mathematica, 48 (1997), 409-422.
25. C.BARDARO - G.VINTI "A Modular convergence theorem for certain nonlinear integral operators with homogeneous kernel", Collectanea Mathematica, 48, (1997), 393-407.
26. C.BARDARO-G.VINTI "A general approach to the convergence theorems of generalized sampling series", Applicable Analysis, 64 (1997), 203-217.
27. C.BARDARO - J.MUSIELAK - G.VINTI "On nonlinear integral operators in spaces Lj ,y (W)", Commentationes Mathematicae, 37 (1997), 23-36.
28. I.MANTELLINI - G.VINTI " φ-variation and nonlinear integral operators", Atti Sem. Mat. Fis.Univ. Modena, volume speciale in Onore del Professor Calogero Vinti, Suppl. Vol. 46 (1998), 847-862.
29. C.BARDARO - J.MUSIELAK - G.VINTI "On the ergodic theorem in some spaces of random variables", Nonlinear Analysis, 33 (1998), 359-365.
30. C.BARDARO - G.VINTI "On the order of modular approximation for nets of integral operators in modular Lipschitz classes", Functiones & Approximatio, 26 (1998), 135-151.
31. C.BARDARO - J. MUSIELAK - G.VINTI "Some modular inequalities related to Fubini-Tonelli theorem", Proceedings of A. Razmadze Mathematical Institute, Georgia, 118 (1998), 3-19.
32. C.BARDARO - G.VINTI "Uniform convergence and rate of approximation for a nonlinear version of the generalized sampling operator", Results in Mathematics, 34 No. 3/4 (1998), 224-240, volume speciale dedicato al Professor P.L. Butzer.
33. C.BARDARO - G.VINTI "The contribution of J. Musielak research to the theory of nonlinear integral operators", apparso sul volume "Viro docto atque iusto Iuliano Musielak", University

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A.Mickiewicz di Poznan (eds. H. Hudzik, M.Jaroszewskiej) Poznan 1999, ISBN 83-911474-1-X.

34. C. BARDARO - G. VINTI "Nonlinear sampling type operators: uniform and modular approximation results", Proceedings of the 1999 International Workshop on Sampling Theory and Applications (Loen, Norway 11-14 August,1999), Norwegian University of Science and Technology, Trondheim, Norway, ISBN 82-7151-0991.
35. C.BARDARO - G.VINTI "Nonlinear integral operators in modular Lipschitz classes: rates of modular approximation", Function Spaces: the fifth conference. Eds: H. Hudzik, L. Skrzypczak, New York: Marcel Dekker, 2000, 71-84.
36. C.BARDARO - J. MUSIELAK - G.VINTI "On nonlinear integro-differential operators in generalized Orlicz-Sobolev spaces", Journal of Approximation Theory, Vol. 105, N. 2 (2000), 238-251.
37. G. VINTI "A general approximation result for nonlinear integral operators and applications to signal processing" , Applicable Analysis, Vol. 79 (2001), 217-238.
38. C.BARDARO - G.VINTI "On some class of integral operators in modular spaces", Far East Journal of Mathematical Sciences, Special Volume (2001), Part II (Functional Analysis and its Applications), 129-154.
39. C. BARDARO - J. MUSIELAK - G. VINTI "Approximation by Riemann sums in modular spaces", Hokkaido Mathematical Journal, Vol. 30 (2001), 253-267 .
40. C. BARDARO - G. VINTI "Nonlinear sampling type operators: approximation properties and regular methods of summability", Nonlinear Analysis Forum, 6 (1) (2001), 15-26.
41. S. SCIAMANNINI - G. VINTI "Convergence and rates of approximation for a class of integral operators", Approximation Theory and its Applications, 17(4) (2001), 17-35.
42. C. BARDARO - S. SCIAMANNINI - G. VINTI "Convergence in BVφ by nonlinear Mellin-type convolution operators", Functiones & Approximatio, 29 (2001), 17-28.
43. C. BARDARO - G. VINTI " Urysohn integral operators with homogeneous kernel: approximation properties in modular spaces", Comment. Math. Prace Math., 42(2), (2002), 145-182.
44. C. BARDARO - J. MUSIELAK - G. VINTI "On nonlinear integral equations in some function spaces", Demonstratio Mathematica, 35 (3) (2002), 583-592.
45. I. MANTELLINI - G. VINTI "Approximation results for nonlinear integral operators in modular spaces and applications", Annales Polonici Mathematici, 81(1), (2003), 55-71.
46. S. SCIAMANNINI - G. VINTI "Convergence results in BVφ for a class of nonlinear Volterra-Hammerstein type integral operators and applications", Journal of Concrete and Applied Mathematics, Vol. 1, N. 4 (2003), 287-306.
47. C.BARDARO - P.L. BUTZER - R.L. STENS - G. VINTI "Convergence in Variation and Rates of Approximation for Bernstein-Type Polynomials and Singular Convolution Integrals, Analysis (Munchen), 23 (2003), 299-340.
48. C. BARDARO - G. VINTI " An abstract approach to sampling type operators inspired by the work of P.L. Butzer. Part I - Linear operators", Journal of Sampling Theory and Signal Image Processing, Vol. 2, No.3 (2003), 271-295.
49. L. ANGELONI - G. VINTI " A unified approach to approximation results with applications to nonlinear sampling theory", International Journal of Mathematical Sciences, Vol. 3, N. 1 (2004), 93-128.
50. C. BARDARO - G. VINTI " An abstract approach to sampling type operators inspired by the work of P.L. Butzer. Part II - Nonlinear operators", Journal of Sampling Theory and Signal Image Processing, Vol 3, No. 1, (2004), 29-44.
51. C. BARDARO - G. VINTI " On the order of BVφ approximation of convolution integral operators over the line group", Commentationes Mathematicae, Tomus Specialis in Honorem Juliani

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Musielak (2005), 47-63.

52. G. VINTI " Approximation in Orlicz spaces for linear integral operators and Applications", Rendiconti del Circolo Matematico di Palermo, Serie II, Suppl. 76 (2005), 103-127.
53. L. ANGELONI - G. VINTI " Rate of approximation for nonlinear integral operators with applications to signal processing", Differential and Integral Equations, Vol. 18, No. 8 (2005), 855-890.
54. C.BARDARO - P.L. BUTZER - R.L. STENS - G. VINTI "Approximation of the Whittaker Sampling Series in terms of an Average Modulus of Smoothness covering Discontinuous Signals", Journal of Mathematical Analysis and Applications, Vol. 316 (2006), 269-306.
55. L. ANGELONI - G. VINTI " Convergence in Variation and Rate of Approximation for Nonlinear Integral Operators of Convolution Type", Results in Mathematics, Vol. 49 (2006), 1-23.
56. C.BARDARO - P.L. BUTZER - R.L. STENS - G. VINTI "Kantorovich-Type Generalized Sampling Series in the Setting of Orlicz Spaces", Sampling Theory in Signal and Image Processing , Vol. 6 (2006), 29-52
57. C. BARDARO - G. VINTI " Approximation of multivariate functions of bounded variation by means of linear convolution operators", Varahmihir Journal of Mathematical Sciences , Vol. 6, No.2 (2006), 393-404.
58. L. ANGELONI - G. VINTI " Approximation by means of nonlinear integral operators in the space of functions with bounded φ-variation" , Differential and Integral Equations, Vol. 20, (2007), 339-360.
59. C. BARDARO – HARUN KARSLI - G. VINTI "On Pointwise Convergence of Linear Integral Operators with Homogeneous Kernels", Integral Transforms and Special Functions, Vol. 19,No.6 (2008), 429-439.
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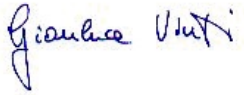
Patents:

- Owners: G. VINTI, D. COSTARELLI, M. SERACINI
  Inventors: G. VINTI, D. COSTARELLI, M. SERACINI
  Title: Device for obtaining information on blood vessels and other hollow body parts
  Patent No. 202017000125290
  Filing date: November 3, 2017
  Grant date: 3 February 2020

- Owners: G. VINTI, C. CAGINI, M. LUPIDI, D. COSTARELLI, M. SERACINI
  Inventors: G. VINTI, C. CAGINI, M. LUPIDI, D. COSTARELLI, M. SERACINI
  Title: Device for the identification of capillary blood vessels and for the assessment of their degree of tissue perfusion
  Patent N. 202020000005164
  Filing date: 11 September 2020
  Grant date: 10 June 2022

Perugia, 10-11-2022



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