

SHORT CV



Prof. Driss SBIBIH

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Driss SBIBIH was born in Asrir, Taza, Morocco. He received BSc in Applied Mathematics from University of Rabat (Morocco), MSc in Applied Mathematics from University of Lille, Doctor in Numerical Analysis from University of Rennes I (France), PhD in Approximation Theory by splines from University Mohammed First, Morocco, in 1982, 1985, 1987, 1994, respectively. From 1987 to 1993 he was research associate at Department of Mathematics, University Mohammed First, Morocco. During 1993-1995 he was a visiting Research Member at Mathematic Center of INSA of Rennes, France. From 1995 to 1999 he was Associate Professor at Department of Mathematics, University Mohammed First. From 1999-present he is a Full Professor at University Mohammed First. His Research Interests are Approximation Theory by splines, Computer Graphics and Numerical Analysis. He was a leader or participant in numerous EU and National projects. From 1999 to 2006 he was the director of Numerical Analysis and Informatic Laboratory at University Mohammed First. From 2006 to 2015 he was Deputy Director of Applied Mathematics, Informatics and Signal Processing Laboratory (MATSI) at University Mohammed First. Since January 2016 he is the director of Numerical Analysis and Optimization Laboratory. He is in editorial board of three journals, Guest Editor of six special issues, co-editor of a Book in SEMA SIMAI Springer Series, organized many conferences. Also, he has proven experience in international cooperation especially with universities in Spain, France, Italy and Algeria. He is an author of more than 180 publications in international journals, conference and workshop proceedings.

A- Research Contributions during the last eight years

1- Papers in leading international journals (with Impact Factor)

- [1] Allouch, C., Sbibih, D., Tahrichi, M. *Spectral approximation methods for nonlinear integral equations with non-smooth kernels* (2023) *Calcolo*, 60 (2), art. no. 23, . DOI: 10.1007/s10092-023-00519-3
- [2] A. Lamnii, M.Y. Nour, D. Sbibih, A. Zidna , *Non-uniform subdivision schemes of ωB -spline curves and surfaces with variable parameters*, *CAD Computer Aided Design*, 2023, 154, 103420
- [3] Allouch, C., Barrera, D., Saou, A., Sbibih, D., Tahrichi, M., *Numerical methods based on spline quasi-interpolation operators for integro-differential equations*, *Journal of Mathematical Modeling*, 2022, 10(4), pp. 387–401.
- [4] C. Alouch, D. Sbibih, M. Tahrichi, *Spectral Approximation Methods for Fredholm Integral Equations with Non-Smooth Kernels*, *Mathematical Modelling and Analysis*, 2022, 27(4), pp. 652–667
- [4] A. Lamnii, M.Y. Nour, D. Sbibih, A. Zidna , *Generalized spline quasi-interpolants and applications to numerical analysis*, *Journal of Computational and Applied Mathematics* this link is disabled, 2022, 408, 114100.
- [5] C. Allouch, A. Medbouhi, D. Sbibih, M. Tahrichi, *Asymptotic Error Expansion of the Iterated Superconvergent Nyström Method for Urysohn Integral Equations*, *International Journal of Applied and Computational Mathematics* this link is disabled, 2021, 7(6), 225.
- [6] C. Allouch, S. Remogna, D. Sbibih, M. Tahrichi, *Superconvergent methods based on quasi-interpolating operators for fredholm integral equations of the second kind*. *Applied Mathematics and Computation* this link is disabled, 2021, 404, 126227.
- [7] D. Barrera, F. El Mokhtari, D. Sbibih, *A quasi-interpolation product integration based method for solving Love's integral equation with a very small parameter*, *Mathematics and Computers in Simulation*, 2020, 172, pp. 213–223.
- [8] D. Barrera, F. El Mokhtari, D. Sbibih, *Non-uniform quasiinterpolation for solving Hammerstein integral equations*, *International Journal of Computer Mathematics*, 2020, 97(1-2), pp. 72–84
- [9] C. Alouch, D. Sbibih, M. Tahrichi, *Richardson Extrapolation of Superconvergent Projection-Type Methods for Hammerstein Equations*, *Numerical Functional Analysis and Optimization*, 2020, 41(7), pp. 806–821.
- [10] Lamberti, P., Lamnii, M., Remogna, S., Sbibih, D., *h -Bernstein basis functions over a triangular domain*, *Computer Aided Geometric Design*, 2020, 79, 101849.
- [11] C. Alouch, D. Sbibih, M. Tahrichi, *Richardson extrapolation based on superconvergent Nyström and degenerate kernel methods*, *Journal Afrika Matematika* 2019, 30(3-4), pp. 469–482
- [12] C. Alouch, D. Sbibih, M. Tahrichi, *Legendre superconvergent Galerkin-collocation type methods for Hammerstein equations* *J. of Computational and Applied Mathematics*; Vol. 353, (2019), pp. 253- 264.
- [13] S. Eddargani, A. Lamnii, M. Lamnii, D. Sbibih, A. Zidna, *Algebraic hyperbolic spline quasi-interpolants and applications*, *J. of Computational and Applied Mathematics*, Vol. 347, (2019), pp.196-209.
- [14] C. Alouch, D. Sbibih, M. Tahrichi, *Numerical solutions of weakly singular Hammerstein integral equations*, *Applied Mathematics and Computation*, Vol. 329, 15 July 2018, 118-128.
- [15] C. Alouch, D. Sbibih, M. Tahrichi, *Superconvergent Nyström method for Urysohn integral equations*, *BIT Numerical Mathematics*, March 2017, Vol. 57, Issue 1, pp 3–20.
- [16] D. Barrera, F. El Mokhtari, D. Sbibih, *Two methods based on bivariate spline quasiinterpolants for solving Fredholm integral equations*, *Applied Numerical Mathematics*, Volume 127, May 2018, 78-94.D.

- [17] A. Bellour, D. Sbibi, A. Zidna, *Two cubic spline methods for solving Fredholm integral equations*, Applied Mathematics and Computation, Vol. 276, (2016), pp. 1-11.
- [18] D. Sbibi, A. Serghini, A. Tijini, A. Zidna, *A fourth order method for finding a simple root of univariate function*, Boletim da Sociedade Paranaense de Matemática, Vol. 34, 2(2016), pp. 197–211
- [19] A. Boujraf, D. Sbibi, M. Tahrichi, A. Tijini, *A Superconvergent Cubic Spline Quasi-Interpolant and Application*, Afrika Matematika, Vol. 26, 7(2015), pp. 1531-1547.
- [20] A. Boujraf, D. Sbibi, M. Tahrichi, A. Tijini, *A simple method for constructing integro spline quasi-interpolants*, Mathematics and Computers in Simulation, Vol. 111, (2015), pp. 36–47.
- [21] D. Sbibi, A. Serghini, A. Tijini, *Superconvergent local quasi-interpolants based on a special bivariate quadratic spline space over a refined quadrangulation*; Applied Mathematics and Computation, Vol. 250, (2015), pp. 145–156.
- [22] D. Sbibi, A. Serghini, A. Tijini, *Superconvergent Quadratic Spline Quasi-interpolants on Powell-Sabin Partitions*, Applied Numerical Mathematics ; Vol. 87, (2015), pp. 74–86
- [23] **D. Sbibi**, A. Serghini, A. Tijini, *Superconvergent trivariate quadratic spline quasi-interpolants on Worsey–Piper split*, J. of Computational and Applied Mathematics; Vol. 276, (2015), pp. 117– 128
- [24] O. Chakrone, O. Diyer, D. Sbibi, *Numerical solution of Burger’s equation based on cubic B-splines quasi-interpolants and matrix arguments*, Boletim da Sociedade Paranaense de Matemática; Vol. 33, 2 (2015), pp. 109–119.

2- Edited books

1. Mathematical and Computational Modelling, Approximation and Simulation, edited in cooperation with D. Barrera and S. Remogna, Elsevier-Amsterdam Volume 186, August 2021 ISSN: 0378-4754.
2. The volume of the SEMA-SIMAI Springer Series, related to the proceedings of the congress MACMAS 2019, with D. Barrera, S. Remogna, (2022).
3. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane, D. Barrera, M. J. Ibanez-Pérez and R. Romero-Zaliz, **EUG** Edition Universidad de Granada, (2017), ISBN: 978-84-338-6064-4.
4. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane and D. Barrera, Elsevier-Amsterdam, (August 2014), ISSN: 0378-4754.
5. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane and D. Barrera, Elsevier-Amsterdam, (May 2014), ISSN :0378-4754.
6. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane, D. Barrera, J. Martinez and A. Palomares, **EUG** Edition Universidad de Granada, (2013), ISBN: 978-84-338-5505-4.
7. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane, D. Barrera, H. Mraoui and P. G. Rodelas, (2011), ISBN:978-84-338-5230-4.
8. Approximation methods and Numerical Modeling in Environment and Natural Resources, edited in cooperation with B. Amaziane and D. Barrera, Elsevier-Amsterdam, (2011), ISSN : 0378- 4754.
9. Mathematical and Computational Modelling, Approximation and Simulation, edited in cooperation with D. Barrera and S. Remogna, Elsevier-Amsterdam, (2021), ISSN : 0378- 4754.
10. Mathematical and Computational Methods for Modelling, Approximation and Simulation, edited in cooperation with D. Barrera and S. Remogna, SEMA SIMAI Springer Series, ISSN2199-3041, E-ISSN2199-305X.

B- Student Supervision (PhD)

Past students: 14

Curent students: 02

C- International and national projects

Coordinator of

- International Project 2020-2023 « PHC Toubkal » TBK/20/101 - CAMPUS N° 43594NB:
« *Approximation et optimisation de courbes et de surfaces fermées : applications à l'imagerie médicale.* »
- International Project 2020-2021 « CNRST / CNR (Italy) »
« *Approximation de courbes et de surfaces 2D et 3D, et application à la modélisation des objets* »
- Research Unity associated with the national center of scientific and technical research
« *Approximation methods based on univariate and multivariate spline functions* » 2010-2016.
- International Project « Action intégrée » AI/08/182 (2008-2011) :
« *Approximation methods based on univariate and multivariate spline functions: Applications to the curve and surface representations and to solving functional equations.* ».
- National Project PROTARS III, D11/18:
« *Spline functions and wavelets, application to Earth sciences* ».
- International Project AECI N°A/012746/07 (2008) :
« *Interpolation y aproximacion spline. Aplicaciones* ».

Member of the team:

- International Project Erasmus Mundus Action IV (2008):
« *Cultural Preparation Course for North African Students coming to Europe* ».
- National Project Global program of Research (2007-2010):
« *Use of the Bio indicators of the quality of the Environment in harbor sediments of Bni Nsar and in nearby beaches* ».

D- Professional recognitions

- Expert to the Moroccan National Centre for Scientific and Technological Research
- Expert to the National Agency for Evaluation and Quality Assurance of Higher Education and Scientific Research.
- Expert to Moroccan center of the innovation
- Organizer of twelve international conferences (2005, 2007, 2009, 2009, 2011, 2013, 2015(2), 2017, 2019, 2022, 2023).
- Guest Editor of six special issues of the international journal Mathematics and Computers in Simulation (Vol. 77, issues 2-3, 2008 ; Vol. 79, issue 12, 2009 ; Vol. 99, May 2014 ; Vol. 102, 2014, Vol. 186, 2021).
- Editor of a book in SEMA SIMAI Springer Series (2022).
- Member Editorial Board of the International Journals: Applied Mathematics and Statistics, Moroccan Journal of Pure and Applied Analysis,
- Invited lecturer in ten international conferences.
- Member of the Scientific Committee of more than 22 international conferences.
- Head of Numerical Analysis and Optimization Laboratory (Since January 2016).
- Coordinator of five academic cooperation between the University Mohammed First and the universities of Granada (Spain), Pau, Lille, Orléans (France) and Media (Algeria).
- Responsible of cooperation at University Mohammed First with the University of Granada.
- Reviewer of at least 18 international journals.
- Member of at least 35 juries of doctoral theses.