

Salem Abdelmalek

2020

Personal Details

DOB: 4/9/1977 in Tebessa, Algeria
Address: Mathematics and Computer Science Department
Faculty of exact sciences and natural sciences and life
Larbi Tebessi University
Tebessa
Country: **Algeria**
Mobile Tel: +213 (0) 66 29 25 623
Primary Email: salllm@gmail.com, salem.abdelmalek@univ-tebessa.dz
Nationality: Algerian



Career Objective

My objective is to teach and conduct research in the field of mathematics at one of the most prominent Universities worldwide.

Education

- **Al-Sharia (Cheria) High School**, Tebessa, Algeria **Sep 1992 – Jun 1995**
Baccalaureate (A-Level Equivalent)
- **University of Oum El-Bouaghi**, Oum El-Bouaghi, Algeria, **Sep 1995 – Jun 1999**
BSc - Mathematics

Result: 70%, Highest average in the class.

Syllabus: Preferred modules included: topology (82.5%), algebra (85%), ... etc.

Graduation Project: "A Study of the Moon's Trajectory Around the Earth and Sun".

- **Mentouri University**, Constantine, Algeria, **Dec 1999 – May 2002**
Majester in Mathematics

Area: **Applied Analysis**.

Dissertation Topic: "Construction Techniques of Gradient Lyapunov Functionals for a Class of Reaction-Diffusion Systems".

Advisor: Prof. Saïd Kouachi.

- **Mentouri University**, Constantine, Algeria, **Nov 2002 – Jun 2008**
PhD in Mathematics

Area: **Partial Differential Equations**.

Dissertation Topic: "Global Existence of Solutions for Reaction-Diffusion Systems via Functional Methods".

Advisor: Prof. Saïd Kouachi.

Experience

- **Associate Professor (Maître de conférences A)** – Tebessa University, Tebessa, Algeria
Permanent **May 2017 – Present**
- **Associate Professor B (Maître de conférences B)** – Tebessa University, Tebessa, Algeria
Permanent **Nov 2009 – May 2017**
- **Assistant Professor** – Taibah University, Engineering Faculty in Yanbu, Saudi Arabia
Contract **Oct 2010 – Aug 2016**
- **Assistant Professor (Chargé de Cours)** – Tebessa University, Tebessa, Algeria
Permanent **Jan 2006 – Nov 2009**
- **Assistant Professor** – Tebessa University, Tebessa, Algeria
Permanent **Dec 2005 – Jan 2006**
- **Assistant Lecturer** – Tebessa University, Tebessa, Algeria
Permanent **Nov 2002 – Dec 2005**

Courses Taught

1. **Calculus II**, 2nd year Physics. (Tebessa University)
2. **Calculus II**, 2nd year Engineering Technology. (Tebessa University)
3. **Topology**, 2nd year Mathematics. (Tebessa University)
4. **Measure and Integration Theory**, 3rd year Mathematics. (Tebessa University)
5. **Algebra**, 2nd year Mathematics. (Tebessa University)
6. **Algebra I & II**, 1st year LMD MI. (Tebessa University)
7. **Topology of Metric Spaces**, 3rd year LMD Mathematics. (Tebessa University)
8. **Introduction to E.D.P**, 3rd year LMD Mathematics. (Tebessa University)
9. **Calculus I & II**, 1st year LMD MI. (Tebessa University)
10. **Numerical Analysis**, 3rd year Mathematics and Science. (Taibah University)
11. **Elasticity**, for Mathematics. (Taibah University)
12. **Calculus I & II**, for Mathematics, Physics, and Computer Science. (Taibah University)
13. **Preparatory Maths** (PYMA001, 002). (Taibah University)
14. **Real Analysis II** for Mathematics. (Taibah University)
15. **Real Analysis I** for Mathematics. (Taibah University)
16. **Functional Analysis** for Mathematics. (Taibah University)

17. **Topology** for Mathematics. (Taibah University).
18. **Mathematics 3**, 2nd year Engineering Technology. (Tebessa University).
19. **Mathematics 4**, 2nd year Engineering Technology. (Tebessa University).
20. **Mathematics 5**, 2nd year Engineering Technology. (Tebessa University).
21. **Numerical Analysis of ODEs and PDEs**, 3rd year Mathematics. (Tebessa University)

Memberships

- **Member of the scientific committee**, mathematics department at the University of Tebessa, from 2004 to 2010.
- **Head of the Mathematics and Computer Science Department**, at the University of Tebessa in the year 2004-2005.
- **Head of the Mathematics**, at the University of Tebessa in the year 2005-2006.
- **Head of the curriculum committee** in the year 2006-2007. I was responsible for putting together a new curriculum for a bachelor degree in Academic Mathematics, currently being taught at the University of Tebessa.
- **Head of the scientific committee**, mathematics department at the University of Tebessa, for two years running 2007-2009.
- **Member of the doctoral school**, for the year 2007/2008.
- **Responsible for all Mathematics courses**, for the year 2010.
- **Responsible for all Mathematics courses**, for the year 2019- **Present**.

Publications

- [1]. S. Abdelmalek and S. Kouachi, Proof of existence of global solutions for m-component reaction-diffusion systems with mixed boundary Conditions via the Lyapunov functional method, J. Phys. A: Math. Theor. 40 (2007) 12335–12350.
<https://iopscience.iop.org/article/10.1088/1751-8113/40/41/005/meta>
- [2]. S. Abdelmalek, Invariant Regions and Global Existence of Solutions for Reaction-Diffusion Systems with a Tridiagonal Matrix of Diffusion Coefficients and Non-homogeneous Boundary Conditions, J. of Applied Mathematics, V 2007, Article ID 12375, 15 pages.
<https://www.hindawi.com/journals/jam/2007/012375/abs/>
- [3]. S. Abdelmalek and S. Kouachi, A Simple Proof of Sylvester's (Determinants) Identity, App.Math. scie. Vol. 2.(2008). no 32. 1571-1580.
<http://www.m-hikari.com/ams/ams-password-2008/ams-password29-32-2008/salemAMS29-32-2008.pdf>
- [4]. S. Abdelmalek, S. Kouachi and B. Rebai, Existence of global solutions to reaction-diffusion systems via a Lyapunov functional, Arch. Math. (Paper 1534) Accepted.
https://scholar.google.com/scholar?q=related:x2Vn--RTIW0J:scholar.google.com/&scioq=&hl=en&as_sdt=0,5

- [5]. S. Abdelmalek, and S. Kouachi, Condensation of determinants arXiv:0712.0822. (2007).
<https://arxiv.org/pdf/0712.0822.pdf>
- [6]. S. Kouachi, S. Abdelmalek, and B. Rebai, A Mathematical Proof of Dodgson's Algorithm arXiv:0712.0362. (2007).
<https://arxiv.org/abs/0712.0362>
- [7]. S. ABDELMALEK and A. YOUKANA, Global existence of solutions for some coupled systems of reaction-diffusion equations, Int. J. of Math. Analysis, Vol. 5, 2011, no. 9, 425 - 432 (2011).
<http://www.m-hikari.com/ijma/ijma-2011/ijma-9-12-2011/abdelmalekIJMA9-12-2011.pdf>
- [8]. S. Abdelmalek, K. Sioud and T. Mekhaznia, Solve Linear System with Sylvester's Condensation, International Journal of Algebra, Vol. 5, (2011), no. 20, 993 – 1003.
<http://www.m-hikari.com/ija/ija-2011/ija-17-20-2011/abdelmalekIJA17-20-2011.pdf>
- [9]. S. Abdelmalek, H. Louafi, and A. Youkana; Existence of global solutions for a Gierer-Meinhardt system with three equations, Electron. J. Diff. Equ., Vol. 2012 (2012), No. 55, pp. 1-8.
<https://ejde.math.txstate.edu/Volumes/2012/55/abdelmalek.pdf>
- [10]. S. Abdelmalek, M. Kirane, and A. Youkana; A Lyapunov functional for a triangular reaction-diffusion system with nonlinearities of exponential growth, Math. Meth. Appl. Sci. (2012) John Wiley & Sons.
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mma.2572>
- [11]. A. Zarái, N-e. Tatar and S. Abdelmalek; Elastic membrane equation with memory term and nonlinear boundary damping: Global existence, decay and blowup of the solution, Acta Mathematica Scientia 2013,33B(1)n01, (2013).
<https://www.sciencedirect.com/science/article/pii/S0252960212601969>
- [12]. S. Abdelmalek, A. Gouadria, and A. Youkana; Global Solutions for a m-Component System of Activator-Inhibitor Type, Abstract and Applied Analysis, vol. 2013, Article ID 939405, 9 pages, 2013
<https://www.hindawi.com/journals/aaa/2013/939405/abs/>
- [13]. S. Abdelmalek, Invariant regions and global solutions for reaction-diffusion systems with a tridiagonal symmetric Toeplitz matrix of diffusion coefficients, Electron. J. Diff. Equ., Vol. 2014 (2014), No. 247, pp. 1-14
<https://www.emis.de/journals/EJDE/2014/247/abdelmalek.pdf>
- [14]. S. Henine; S. Abdelmalek; A.Youkana, Boundedness and large-time behavior of solutions for a Gierer-Meinhardt system of three equations. Electron. J. Diff. Equ., Vol. 2015 (2015), No. 94, pp. 1-11.
<https://ejde.math.txstate.edu/Volumes/2015/94/henine.pdf>
- [15]. S. Abdelmalek, M. Bajneed and K. Sioud, Nonexistence of solutions to Cauchy problems for fractional time semi-linear pseudo-hyperbolic systems, Electron. J. Diff. Equ., Vol. 2016 (2016), No. 22, pp. 1-14.
<https://ejde.math.txstate.edu/Volumes/2016/20/abdelmalek.pdf>
- [16]. S. Abdelmalek, Existence of global solutions via invariant regions for a generalized reaction-diffusion system with a tri-diagonal Toeplitz matrix of diffusion coefficients, Func. Anal. TMA 2 (2016) , 12-27.

<http://vonneumann-publishing.com/fatma/articles-48-existence-of-global-solutions-via-invariant-regions-for-a-generalized-reaction-diffusion-system-with-a-tri-diagonal-toeplitz-matrix-of-diffusion-coefficients>

[17]. S. Bendoukha, S. Abdelmalek, Invariant regions and existence of global solutions to reaction-diffusion systems without conditions on the growth of nonlinearities, *Electron. J. Diff. Equ.*, Vol. 2016 (2016), No. 256, pp. 1-11.

<https://ejde.math.txstate.edu/Volumes/2016/156/bendoukha.pdf>

[18]. S. Abdelmalek, S. Bendoukha, Global asymptotic stability of a diffusive SVIR epidemic model with immigration of individuals; *Electron. J. Diff. Equ.*, Vol. 2016 (2016), No. 284, pp. 1-14.

<https://ejde.math.txstate.edu/Volumes/2016/284/abdelmalek.pdf>

[19]. S. Abdelmalek, S. Bendoukha, On the global asymptotic stability of solutions to a generalised Lengyel-Epstein system; *Nonlinear Analysis: Real World Applications*, 35C (2017) pp. 397-413.

[20]. DOI: 10.1016/j.nonrwa.2016.11.007, **Impact Factor : 2018: 2.085, Q1/_ISSN:** 1468-1218

<https://www.sciencedirect.com/science/article/pii/S1468121816301493>

[21]. S. Abdelmalek, S. Bendoukha, B. Rebiai On the stability and nonexistence of Turing patterns for the generalised Lengyel-Epstein model. *Math Meth Appl Sci.* 2017; **Volume:** 40, **Issue:** 18, **Pages:** 6295-6305, DOI: 10.1002/mma.4457, **Impact Factor : 2018: 1.533, Q2/_ISSN:** 0170-4214

<https://onlinelibrary.wiley.com/doi/abs/10.1002/mma.4457>

[22]. A.Ouannas, S. Abdelmalek, S. Bendoukha, (2017). Coexistence of some chaos synchronization types in fractional-order differential equations. *Electronic Journal of Differential Equations*, 2017(128), 1-15. **Impact Factor : 2018: 0.69, Q2/_ISSN:** 1072-6691

<https://pdfs.semanticscholar.org/3718/a03ff225857b300f82bcc39a7c8f557553b2.pdf>

[23]. S. Abdelmalek, S. Bendoukha, Global existence of solutions for an m-component reaction-diffusion system with a tridiagonal 2-Toeplitz diffusion matrix and polynomially growing reaction terms, *Commun. Nonlinear Anal.* 1 (2017), 1-14

<http://vonneumann-publishing.com/cna/91/download-global-existence-of-solutions-for-an-m-component-reactiondiffusion-system-with-a-tridiagonal-2-toeplitz-diffusion-matrix-and-polynomially-growing-reaction-terms>

[24]. S. Abdelmalek, S. Bendoukha, Global asymptotic stability for a SEI reaction-diffusion model of infectious diseases with immigration, *Int. J. Biomath.* 11, **Issue:** 3, 1850044 (2018), DOI: 10.1142/S1793524518500444, **Impact Factor : 2018: 0.894, Q4**

<https://www.worldscientific.com/doi/abs/10.1142/S1793524518500444>

[25]. S. Abdelmalek, S. Bendoukha, B. Rebiai, M. Kirane, Extended Global Asymptotic Stability Conditions for a Generalized Reaction-Diffusion System, *Acta Appl Math.* (2019): **V 160 Issue:** 1, pp 1-20, DOI: 10.1007/s10440-018-0191-0, **Impact Factor : 2018: 1.035, Q3**

<https://link.springer.com/article/10.1007/s10440-018-0191-0>

[26]. Z. Messaoud, S. Bendoukha, and S. Abdelmalek. Global existence of solutions for an m-component cross-diffusion system with a 3-component case study. *Nonlinear Analysis: Real World Applications* 45 (2019): 262-284. DOI: 10.1016/j.nonrwa.2018.07.011, **Impact Factor : 2018: 2.085, Q1/_ISSN:** 1468-1218

<https://www.sciencedirect.com/science/article/pii/S1468121818307107>

- [27]. A. Abbad, S. Bendoukha, S. Abdelmalek, On the local and global asymptotic stability of the Degrn-Harrison reaction–diffusion model. *Math Meth Appl Sci.* 2019; **V42, Issue: 2**, pp 567-577, **DOI:** 10.1002/mma.5362, **Impact Factor : 2018: 1.533, Q2/ISSN:** 0170-4214
<https://onlinelibrary.wiley.com/doi/abs/10.1002/mma.5362>
- [28]. S. Bendoukha, S. Abdelmalek, and S. Abdelmalek. "A new combined actuator fault estimation and accommodation for linear parameter varying system subject to simultaneous and multiple faults: an LMIs approach." *Soft Computing* (2018): 1-14. **Impact Factor : 2018: 2.784, Q2**
<https://link.springer.com/article/10.1007/s00500-018-3601-3>
- [29]. S. Bendoukha, S. Abdelmalek, The Fractional Chua Chaotic System: Dynamics, Synchronization, and Application to Secure Communications , *International Journal of Nonlinear Sciences and Numerical Simulation*, (2019) **V20, Issue: 1, pp 77-88**, DOI: 10.1515/ijnsns-2018-0195, **Impact Factor : 2018: 1.033, Q3/ISSN:** 1565-1339
<https://www.degruyter.com/view/ijnsns.2019.20.issue-1/ijnsns-2018-0195/ijnsns-2018-0195.xml>
- [30]. S. G Khan, S. Bendoukha, S. Abdelmalek, Chaos Stabilization and Tracking Recovery of a Faulty Humanoid Robot Arm in a Cooperative Scenario, *Vibration* **2019**, 2(1), 87-101.
<https://www.mdpi.com/2571-631X/2/1/6>
- [31]. A. Ouannas, S. Bendoukha, A. Karouma, S. Abdelmalek, A General Method to Study the Co-Existence of Different Hybrid Synchronizations in Fractional-Order Chaotic Systems, *International Journal of Nonlinear Sciences and Numerical Simulation*, DOI: <https://doi.org/10.1515/ijnsns-2018-0095>
<https://www.degruyter.com/view/ijnsns.ahead-of-print/ijnsns-2018-0095/ijnsns-2018-0095.xml>
- [32]. D. Mansouri, S. Abdelmalek and S. Bendoukha, On the asymptotic stability of the time-fractional Lengyel–Epstein system, *Computers and Mathematics with Applications* (2019) V 78, Issue 5, 1 September 2019, Pages 1415-1430, <https://doi.org/10.1016/j.camwa.2019.04.015>. **Impact Factor : 2018: 2.811, Q1**
- [33]. D. Mansouri, S. Bendoukha, S. Abdelmalek & A. Youkana (2019): On the complete synchronization of a time-fractional reaction–diffusion system with the Newton–Leipnik nonlinearity, *Applicable Analysis*, DOI: 10.1080/00036811.2019.1616694
- [34]. L. Djebara; S. Abdelmalek, S. Bendoukha, Global Existence and Asymptotic Behavior of Solutions for Some Coupled Systems via a Lyapunov Functional, *ACTA MATHEMATICA SCIENTIA*, V39 Issue: 6, pp: 1538-1550, 2019, DOI: 10.1007/s10473-019-0606-7 **Impact Factor : 2018: 0.992, Q2**
- [35]. R. Douaifia, S. Abdelmalek, S. Bendoukha, Asymptotic stability conditions for autonomous time–fractional reaction–diffusion systems, *Commun Nonlinear Sci Numer Simulat*, Volume 80, January 2020, 104982, <https://doi.org/10.1016/j.cnsns.2019.104982> **Impact Factor : 2018: 3.967, Q1**
- [36]. R. Douaifia, S. Abdelmalek, A Predictor-Corrector Method for Fractional Delay-Differential System with Multiple Lags, *Commun. Nonlinear Anal.* 6(1) (2019), 78-88
- [37]. A. Djeddi, D. Dib, A-T. Azar, S. Abdelmalek, Fractional Order Unknown Inputs Fuzzy Observer for Takagi–Sugeno Systems with Unmeasurable Premise Variables, *Mathematics* **2019**, 7(10), 984; <https://doi.org/10.3390/math7100984>
- [38]. S. Bendoukha, S. Abdelmalek, M. Kirane, The global existence of solutions and asymptotic stability of a reaction-diffusion system. *Nonlinear Analysis: Real World Applications*, V53, 2020, 103052, <https://doi.org/10.1016/j.nonrwa.2019.103052>, **Impact Factor : 2018: 2.085, Q1/ISSN:** 1468-1218

[39].A. Gouadria, S. Bendoukha, S. Abdelmalek, Global Existence of Solutions for A Gierer-Meinhardt System with Two Activators and Two Inhibitors, Commun. Nonlinear Anal. \forall (1) (2019), 58-72

http://www.cna-journal.com/article_95603.html

[40].D. Mansouri, **S. Abdelmalek**, and S. Bendoukha. "Bifurcations and pattern formation in a generalized Lengyel–Epstein reaction–diffusion model." Chaos, Solitons & Fractals 132 (2020): 109579.

<https://doi.org/10.1016/j.chaos.2019.109579>

Books and Chapters

1. S. Abdelmalek, Existence globale des solutions des Systèmes de Réaction-Diffusion, Univ Européenne, ISBN 9786138405061, 2018.

https://www.buecher.de/shop/buecher/existence-globale-des-solutions-des-systmes-de-raction-diffusion/abdelmalek-salem/products_products/detail/prod_id/53170623/

2. S. Abdelmalek, Cours de Mathématiques 3, Univ Européenne, ISBN 9786202287432 , 2018.

https://www.researchgate.net/profile/S_Abdelmalek/publication/313904201_Cours_de_Mathematiques_3/links/5af0d5e70f7e9ba3664522bd/Cours-de-Mathematiques-3.pdf

3. S. Abdelmalek, S. Bendoukha, The Lengyel–Epstein Reaction Diffusion System, H. Dutta and J. F. Peters (eds.), Applied Mathematical Analysis: Theory, Methods, and Applications, Studies in Systems, Decision and Control 177, Springer Nature Switzerland AG 2020.

https://link.springer.com/chapter/10.1007/978-3-319-99918-0_10

4. S. Bendoukha, S. Abdelmalek, A.Ouannas, Secure Communication Systems Based on the Synchronization of Chaotic, F. Smith et al. (eds.), Mathematics Applied to Engineering, Modelling, and Social Issues, Studies in Systems, Decision and Control 200, Systems, Springer Nature Switzerland AG 2019.

https://link.springer.com/chapter/10.1007/978-3-030-12232-4_9

5. Abbad, Abir, Salem Abdelmalek, and Samir Bendoukha. "2 Complete Synchronization of a Time-Fractional Reaction–Diffusion System with Lorenz Nonlinearities." Mathematical Methods in Engineering and Applied Sciences (2020): 19.

6. Bendoukha, Samir, Jin-Man He, and Salem Abdelmalek. "7 Complete Synchronization of Hybrid Spatio-temporal Chaotic Systems." Mathematical Methods in Engineering and Applied Sciences (2020): 159.

Editorial Board Members

American Journal of Mathematical and Computational Sciences

SCIREA Journal of Mathematics

International Journal of Systems Science and Applied Mathematics(IJSSAM)

Referee/Reviewer:

Applicable Analysis, Electronic Journal of Differential Equations, Applied mathematics E-Notes, International Journal of Biomathematics, American Mathematical Society (AMS) MathSciNet....

Conference Proceedings

- [1]. Marrakech World Conference on Differential Equations and Applications which will be held in Marrakech June 15-20, 2006 "" Existence of global solutions to reaction-diffusion systems via a Lyapunov functional".

- [2]. International conference of Mathematics and Applications, 26-28 Octobre 2009, “Global existence of solutions in time for a fractional reaction-diffusion system”.
- [3]. A. Ouannas, V-Th Pham, S. Abdelmalek, T. Ziar, O. Boubaker, **Q-S Chaos Synchronization Between Fractional-Order Master and Integer-Order Slave Systems**, 2018 15th International Multi-Conference on Systems, Signals & Devices (SSD), DOI: [10.1109/SSD.2018.8570389](https://doi.org/10.1109/SSD.2018.8570389). Date of Conference: 19-22 March 2018, Conference Location: Yasmine Hammamet, Tunisia.

<https://ieeexplore.ieee.org/abstract/document/8570389/>

Masters Dissertations Examined

- [1]. Entitled: “Existence globale de solutions en temps pour un système de réaction-diffusion fractionnaire.” prepared by the student Hichem Louafi, 28/01/2009. University of Tébessa, 12002.
- [2]. Entitled: “Existence globale de solutions en temps pour un système de réaction-diffusion” prepared by the student Mairi Bilel, 2010. University of Annaba, 23000.

Research projects

- [1]. Problèmes d'Équations d'Evolution Non Linéaires et Applications. B 01320100035. Batna University
- [2]. Existence of Global Solutions Via Invariant Regions for a Generalized Reaction-Diffusion System with a Tri-diagonal Toeplitz Matrix of Diffusion Coefficients. Number of project 573/2014. Taibah University
- [3]. Non-linear system with fractional differentiation, Number of project 4113/1434. Taibah university
- [4]. The inversion of Laurent Polynomial Matrices for use in Signal Processing and Communications, Number of project 6198/1435. Taibah university.
- [5]. Problèmes hyperboliques, paraboliques et applications. B013201140102. Batna University.

Supervision

Bachelor Degree (Tebessa University).

Title of Project	Degree	Students	Presentation Date
Inequalities	Graduation Project	Zeghoune Sara Aounallah Nassima	June 2009
The Laplace Transformation	Graduation Project	Nabti Abderrazk	June 2010

Bachelor Degree (Taibah University).

the year	Students	University ID	Title of Project
2013-2014	Nawal saeid almutairi	3069637	An Introduction to the Fractional Calculus
	Huda Jameeil Al-Refaae	3069641	
	Khlood Melfi Al-Harbi	3069536	

	Jihad Zaki al-Juhani	3010796	The Jacobi Iterative Method for Real Symmetric Matrices
	Ziad Salem al-Juhani	3010559	
	Yusuf Salim Hujily	3010631	
	Abdullah Ibrahim Arraddadi	3010650	
2014–2015	Khaled Aljohny	3111090	The Jacobi Iterative Method for Complex Hermitian Matrices
	Mazen Attajami	3130283	
2015–2016	Aisha Musleh Alrefaei	3202413	A Framework for Laurent Polynomial Matrices
	Tagread Yasser Aynosa	3201837	
	Alia Owidah Alrefaei	3202193	
	Basma Mousa Alsenani	3204233	
	Gharam Hamed Mozain	3202670	
	Manal Ahmad Aljohani	3202582	
	Hanan Saud Aleyadhi	3151172	

Master Degree (Tebessa University).

Title of Project	Degree	Students	the year
L'étude de stabilité d'un système de Gierer-Minhardt	Master Project	Gasmi Laila Khemaissia Afaf	2016-2017
An Investigation of the Lengyel-Epstein Reaction-Diffusion System	Master Project	Chiheb Abderraouf Degaichia Ouissem	

Master Degree Co-Supervision, (Tebessa University).

- [1]. Hichem louafi, Global existence of solutions for certain reaction-diffusion systems with fractional reactions, Examined on 28/1/2009.

PhD Co-Supervision, (Tebessa University).

- [1]. Messaoud Zaidi, Etude des solutions globales de certains systèmes de réaction diffusion par méthodes fonctionnelles, Beginning of the year 2016-2018.

PhD Supervision, (Tebessa University).

- [1]. Mezhoud Rachida, Local and Global Asymptotic Stability of an ODE/PDE Epidemic Model, **Doctorat en science**, Année de 1ere Inscription : 2017-2018
- [2]. Abir Abbad, Dynamics of a Turing-type reaction-diffusion model, **Doctorat LMD**, Année de 1ere Inscription : 2017-2018.
- [3]. Abdelouahab Gouadria, Synchronization of chaotic reaction-diffusion systems with an integer or fractional time derivative, **Doctorat en science**, Année de 1ere Inscription : 2018-2019
- [4]. Nouar Chorfi , Control and applications of dynamical systems, **Doctorat LMD**, Année de 1ere Inscription : 2018-2019.
- [5]. Redouane Douaifia, Dynamics of Activator Inhibitor reaction-diffusion model., **Doctorat LMD**, Année de 1ere Inscription : 2018-2019.

PhD Supervision, (Khenchela University).

- [6]. Mansouri Djamel, Dynamics of the Lengyel-Epstein Reaction-Diffusion System and its Generalizations, **Doctorat en science**, Année de 1ere Inscription : 2017-2018
- [7]. Lamia Djebara, Asymptotic Stability of an Epidemic Reaction-diffusion Model, **Doctorat en science**, Année de 1ere Inscription : 2017-2018

Areas of research

- Partial differential equations (reaction-diffusion equations....).
- Applied analysis.
- Linear algebra.

General Skills

- Familiar with Microsoft Office products and the LATEX , MATLAB, 3B2 environment.
- Proficient use of Scientific Workplace for mathematical manipulation and text editing.
- Operating systems: Windows general use and underlying structure.
- Spoken languages: Arabic (Native), English (good level), French (Intermediate).