



MOHAMED MAJDOUB

PROFESSOR

Personal Data

Nationality | Tunisian

Department | Mathematics

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Language Proficiency

Language	Read	Write	Speak
Arabic	X	X	X
English	X	X	X
French	X	X	X

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2006	HDR	Tunisia	University Tunis El Manar
2000	PhD	Tunisia	University Tunis El Manar
1992	Bachelor of Science in Mathematics	Tunisia	University Tunis El Manar

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	On some evolutive nonlinear partial differential equations
Master	
Fellowship	

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work		Date
Professor	Tunisia	University Tunis El Manar	2012-2016
Associate Professor	Tunisia	University Tunis El Manar	2006-2011
Assistant Professor	Tunisia	University Tunis El Manar	2001-2006



Scientific Achievements

Published Refereed Scientific Researches (In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Bousbih Hafedh & Majdoub Mohamed	Weak solutions for generalized stationary Oldroyd-B fluid with a diffusive stress.	<i>Georgian Math. J.</i> 23 (2016), no. 4, 469–475.
2	Bousbih Hafedh & Majdoub Mohamed	Existence and uniqueness of strong-weak solutions for chemically reacting generalized second grade fluids in 2 space dimensions	<i>Math. Methods Appl. Sci.</i> 39 (2016), no. 12, 3243–3254.
3	Majdoub, Mohamed; Masmoudi, Nader	On uniqueness for supercritical nonlinear wave and Schrödinger equations	<i>Int. Math. Res. Not. IMRN</i> 2015, no. 9, 2386–2405
4	Bousbih, Hafedh; Majdoub, Mohamed	Existence and uniqueness of strong solution for shear thickening fluids of second grade	<i>J. Partial Differ. Equ.</i> 27 (2014), no. 2, 95–114
5	Ibrahim, Slim; Jrad, Rym; Majdoub, Mohamed; Saanouni, Tarek	Local well posedness of a 2D semilinear heat equation	<i>Bull. Belg. Math. Soc. Simon Stevin</i> 21 (2014), no. 3, 535–551
6	Bahouri, Hajer; Majdoub, Mohamed; Masmoudi, Nader	Lack of compactness in the 2D critical Sobolev embedding, the general case	<i>J. Math. Pures Appl. (9)</i> 101 (2014), no. 4, 415–457
7	Bejaoui, Olfa; Majdoub, Mohamed	Global weak solutions for some Oldroyd models	<i>J. Differential Equations</i> 254 (2013), no. 2, 660–685
8	Ibrahim, S.; Majdoub, M.; Masmoudi, N.; Nakanishi, K.	Scattering for the two-dimensional NLS with exponential nonlinearity	<i>Nonlinearity</i> 25 (2012), no. 6, 1843–1849
9	Bahouri, Hajer; Majdoub, Mohamed; Masmoudi, Nader	Lack of compactness in the 2D critical Sobolev embedding, the general case	<i>C. R. Math. Acad. Sci. Paris</i> 350 (2012), no. 3-4, 177–181
10	Ibrahim, Slim; Majdoub, Mohamed; Masmoudi, Nader	Well- and ill-posedness issues for energy supercritical waves	<i>Anal. PDE</i> 4 (2011), no. 2, 341–367
11	Bahouri, Hajer; Majdoub, Mohamed; Masmoudi, Nader	On the lack of compactness in the 2D critical Sobolev embedding	<i>J. Funct. Anal.</i> 260 (2011), no. 1, 208–252
12	Bulíček, Miroslav; Majdoub, Mohamed; Málek, Josef	Unsteady flows of fluids with pressure dependent viscosity in unbounded domains	<i>Nonlinear Anal. Real World Appl.</i> 11 (2010), no. 5, 3968–3983
13	Ibrahim, Slim; Majdoub, Mohamed; Masmoudi, Nader; Nakanishi, Kenji	Scattering for the two-dimensional energy-critical wave equation	<i>Duke Math. J.</i> 150 (2009), no. 2, 287–329
14	Colliander, J.; Ibrahim, S.; Majdoub, M.; Masmoudi, N.	Energy critical NLS in two space dimensions	<i>J. Hyperbolic Differ. Equ.</i> 6 (2009), no. 3, 549–575
15	Majdoub, Mohamed; Paicu, Marius	Uniform local existence for inhomogeneous rotating fluid equations	<i>J. Dynam. Differential Equations</i> 21 (2009), no. 1, 21–44
16	Ibrahim, Slim; Majdoub, Mohamed; Masmoudi, Nader	Ill-posedness of H ¹ -supercritical waves	<i>C. R. Math. Acad. Sci. Paris</i> 345 (2007), no. 3, 133–138
17	Ibrahim, S.; Majdoub, M.; Masmoudi, N.	Double logarithmic inequality with a sharp constant	<i>Proc. Amer. Math. Soc.</i> 135 (2007), no. 1, 87–97
18	Ibrahim, Slim; Majdoub, Mohamed; Masmoudi, Nader	Global solutions for a semilinear, two-dimensional Klein-Gordon equation with exponential-type nonlinearity	<i>Comm. Pure Appl. Math.</i> 59 (2006), no. 11, 1639–1658
19	Benameur, J.; Ghazel, M.; Majdoub, M.	About MHD system with small parameter	<i>Asymptot. Anal.</i> 41 (2005), no. 1, 1–21
20	Benameur, J.; Ibrahim, S.; Majdoub, M.	Asymptotic study of a magneto-hydrodynamic system	<i>Differential Integral Equations</i> 18 (2005), no. 3, 299–324
21	Majdoub Mohamed	Qualitative study of the critical wave equation with a subcritical perturbation	<i>J. Math. Anal. Appl.</i> 301 (2005), no. 2, 354–365
22	Ibrahim, Slim; Majdoub, Mohamed	Comparaison des ondes linéaires et non-linéaires à coefficients variables (French)	<i>Bull. Belg. Math. Soc. Simon Stevin</i> 10 (2003), no. 2, 299–312
23	Ibrahim, Slim; Majdoub, Mohamed	Solutions globales de l'équation des ondes semi-linéaire critique à coefficients variables (French)	<i>Bull. Soc. Math. France</i> 131 (2003), no. 1, 1–22



24	Gallagher, Isabelle; Ibrahim, Slim; Majdoub, Mohamed	Existence et unicite de solutions pour le système de Navier-Stokes axisymétrique (French)	<i>Comm. Partial Differential Equations</i> 26 (2001),no. 5-6, 883–907
25	Gallagher, Isabelle; Ibrahim, Slim; Majdoub, Mohamed	Solutions axisymétriques des équations de Navier-Stokes (French)	<i>C. R. Acad. Sci. Paris Sér. I Math.</i> 330 (2000), no. 9, 791–794
26	Ibrahim, Slim; Majdoub, Mohamed	Existence globale de solutions pour l'équation des ondes semi-linéaire critique à coefficients variables (French)	<i>C. R. Acad. Sci. Paris Sér. I Math.</i> 328 (1999), no. 7, 579–584.

Current Researches

#	Research Title	Name of Investigator(s)
1	Local well-posedness and global existence for the biharmonic heat equation with exponential nonlinearity	Mohamed Majdoub, Sarah Otsmane, Slim Tayachi
2	Existence and regularity of source-type self-similar solutions for the thin-film equation with gravity	Mohamed Majdoub, Slim Tayachi
3	Global existence and decay estimates for the heat equation with power-exponential nonlinearities	Mohamed Majdoub, Slim Tayachi
4	Uniqueness for the thin-film equation with a Dirac mass as initial data	Mohamed Majdoub, Nader Masmoudi, Slim Tayachi

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Seminar of PDE	Polytechnical School of France (2005)	Talk
2	Analysis Seminar	Courant Institute of Mathematical Sciences, New York University (2009)	Talk
3	Nonlinear PDE conference	Beijing, China (2010)	Talk
4	Seminar of PDE	Czech Technical University in Prague (2009)	Talk

Membership of Scientific and Professional Societies and Organizations

- Head of the laboratory of PDEs, University Tunis El Manar, 2010 to 2016
- General secretary of the Tunisian Mathematical Society, 2014 to 2016
- Co-organiser of "Colloque EDP et applications", Hammamet, Tunisia 2008



Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Partial Differential Equations	4304	Lecture
2	Partial Differential Equations	4305	Laboratory
3	Partial Differential Equations	4309	Lecture
4	Partial Differential Equations	4310	Laboratory
5	Applied Maths	8642	Lecture
6	Applied Maths	8643	Laboratory
7	Special Functions	8736	Lecture
8	Special Functions	8737	Laboratory
9	PDEs	8557	Lecture

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	PhD	On some Oldroyd models	University Tunis El Manar	2013
2	PhD	Semilinear Schrodinger Equations	University Tunis El Manar	2011
3	PhD	On some partial differential equations arising from non-newtonian fluid mechanics	University Tunis El Manar	2016
4	PhD	Trudinger-Moser inequalities and applications	University Tunis El Manar	2016
5	PhD	Asymptotic analysis for Vlasov-Navier-Stokes system in bounded domain	University Tunis El Manar	2010

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	Master	Semilinear Heat Equation	Imam Abdulrahman Alfaisal University	2017
2	Master	Semilinear Wave Equation	Imam Abdulrahman Alfaisal University	2017

Last Update

December 9, 2018