

Khaled ZENNIR

Al Qassim University, KSA

+966 559355871

✉ khaledzennir2@yahoo.com - November 2015

Personal informations

| | |
|-------------------------|--|
| Name | Khaled ZENNIR |
| Date and place of birth | May 04, 1982, Oum Toub, Skikda, Algeria |
| Nationality | Algerian |
| Marital Status | Married with three Childrens (Razane, Mohamed Fadi and Racha) |
| Address 01 | Al Qassim University, KSA |
| Address 02 | Poste de Bil El Ouidane, Tamalous, Skikda, 21052, Algeria |
| E.Mail | khaledzennir4@yahoo.com |
| Tel num | 00213 670 276 121 (Alg) and 00966 559355871 (KSA) |
| Homepage | http://elearning.univ-skikda.dz/course/view.php?id=318 http://www.faculty.qu.edu.sa/76342/Pages/about.aspx |

Studies

| | |
|---------------|--|
| May 2015 | HDR degree (Habilitation- Mathematics)- Option : PDEs, University Constantine 1, 25000, Algeria |
| December 2013 | Ph.D Thesis in Mathematics- Option : PARTIAL DIFFERENTIAL EQUATIONS, University Djillali Liabes of Sidi Bel Abbes, 22000, Algeria |
| February 2009 | Magister Thesis in mathematics- Option : DYNAMIC SYSTEMS AND FUNCTIONAL ANALYSIS, University Badji mokhtar –Annaba, 2300, Algeria |
| June 2006 | Diploma of Graduate Studies (BAC+4 years) in mathematics- Option : NUMERICAL ANALYSIS, University 20 Août 1955, SKIKDA, 21000, Algeria |
| June 2000 | BAC (End of high school studies), New Secondary school of Tamalous, SKIKDA, 21000, Algeria |

Areas of research interest

- 1 Study of existence/ nonexistence and asymptotic behavior of solutions of nonlinear evolution problems
- 2 PED in hyperbolic type
- 3 Control of PDEs

Talks in conferences and seminars

| | |
|----------------------|--|
| December 09-10, 2015 | Days on applied mathematics and its applications, Organized at University 20 Août 1955, Skikda, Algeria. Under title: "Decay rate estimate of solution to damped wave equation with memory term in Fourier spaces" |
|----------------------|--|

- December 01-02, 2014 Second scientific national days , Organized at Higher Normal School of Technology Education, Skikda, Algeria. Under title: "General decay of solutions of wave equation with density and memory term in R^n "
- November 26-27, 2014 Days on applied mathematics and its applications, Organized at University 20 Août 1955, Skikda, Algeria. President of the Organizing Committee.
- October 27-29, 2014 Seminar on PDE and its applications, Organized at University Bordj Bouariridj, Algeria. Member of the Scientific Committee.
- May 20-22, 2013 Workshop on mathematics modelling and control, Organized at University Badji Mokhtar, Annaba, Algeria. Under title: "Decay results for higher-order degenerate Kirchhoff equation"
- April 17-18, 2013 National conference of mathematics and applications CNMA'13, Organised at University Abbes Laghour of Khenchela, Algeria. Under title: "On the nonexistence of solutions to degenerately damped system of nonlinear viscoelastic wave equations"
- December 12, 2011 Day of mathematics at University of sciences and technology of Oran, Algeria. Under title: " Global nonexistence of solutions to systeme of nonlinear viscoelastic wave equations with degenerate damping and source terms".
- November 29-30, 2011 National Days of applied mathematics, JNMA'11 at University 20 Août 1955 SKIKDA, Algeria. Under title: " Blow up for all time of positive initial energy solutions to system of a nonlinear wave equations with degenerate damping and source terms".
- march 01, 2011 Second Day between Algerian-Tunisian searchers of Partial Differential Equations " JATEDPC'2011 " Organized at University of Djillali LIABES, SIDI BEL ABBES, Algeria. Under title: " Existence and exponential growth of solutions for a nonlinear viscoelastic wave equation".
- November 10-12, 2008 The 3rd Days on Differential Equations and Applications "JEDAIII" Organized at the University of ANNABA, Algeria. Under title: "Existence and decay of solutions of a nonlinear viscoelastic hyperbolic equation".
- October 28-30, 2008 The International Seminar on Mathematical Analysis "SIAM" Organized at the University of JIJEL, Algeria. Under title: " Existence and asymptotic behavior of solutions for a nonlinear viscoelastic wave equation".

Publications

Papers preprint (Accepted/Revised)

- 1 Existence and decay of solution to coupled system of viscoelastic wave equations with strong damping in R^n , by Khaled ZENNIR and Mohamed Karek, (J. Adv. Rese. Appl. Math.).
- 2 On the absence of solutions to damped system of nonlinear wave equations of Kirchhoff-type, by Khaled ZENNIR and Salah ZITOUNI, (Vladikavkaz Mathematical Journal).
- 3 Energy decay result for a nonlinear wave p -Laplac equation with a delay term, by khaled zennir (Mathematica Applicanda)
- 4 General decay of solution for a coupled system of viscoelastic wave equations with density in R^n , by khaled zennir and Mohamed Karek (Demonstratio Mathematica)

Papers available online

- 1 General decay of solution to weak-viscoelastic wave equation with strong damping in Fourier spaces, Global Journal of Pure and Applied Mathematics, Vo 11, N 5 (2015), pp. 3027-3038.
- 2 Existence of solutions to nonlinear kappa-th-order coupled klein-gordon equations with nonlinear sources and memory termes, Applied Mathematics E-Notes, 15(2015), 121-136.
- 3 Existence and blow-up of solution for nonlinear viscoelastic wave equation with delay term, J. Adv. Res. Appl. Math., Vol. 7, Issue. 4, 2015, pp. 45-61
- 4 General Energy decay for nonlinear wave equation of ϕ -Laplacian type with a delay term in the internal feedback, Malaya J. Mat. 3(2)(2015) 136–145
- 5 General decay of solutions for damped wave equation of Kirchhoff type with density in R^n , 2015, Annali dell'università di ferrara, DOI 10.1007/s11565-015-0223-x
- 6 General decay of solution of wave equation with density and memory term in R^n , J. Adv. Resear. Dynam. Control Syst, Vol. 7, Issue 2, pp. 54-65, (2015).
- 7 Growth of solutions with positive initial energy to system of degeneratly damped wave equations with memory, Lobachevskii journal of mathematics, Vol. 35, No. 2, pp. 147–156, (2014) Pleiades Publishing, Ltd.
- 8 Growth of solutions with $L^{2(\rho+2)}$ -norm to system of damped wave equations with strong sources, Electronic Journal of Mathematical Analysis and Applications. Vol. 2(2) (2014), pp. 46-55
- 9 Global nonexistence of solutions to system of nonlinear viscoelastic wave equations with degenerate damping and source terms, Ukrainian Mathematical Journal, Vol. 65, No. 7, (2013)
- 10 Growth of solutions to systems of nonlinear wave equations with degenerate damping and strong sources, Journal of Nonlinear Analysis and Applications 2013 (2013) 1-11
- 11 Exponential Growth of Solutions with L_p -norm of a Nonlinear Viscoelastic Hyperbolic Equation, Journal of Nonlinear Sciences and Applications 6 (2013), 252-262
- 12 Blow up of positive initial-energy solutions to systems of nonlinear wave equations with degenerate damping and source terms, Nonlinear studies studies. (J. I) Vol.19, No.4 pp 523-535, (2012)
- 13 Decay of Solutions of a Nonlinear Viscoelastic Hyperbolic Equation, An - Najah University Journal Research. (N. Sc.) Vol. 26, 19-42, (2012)

Papers submitted

- 1 Existence and stability of solutions to the Cauchy problem for a coupled system of a nonlinear weak-viscoelastic wave equations in R^n , by Abbas Benaissa, Abderrahmane Beniani and khaled zennir (to Nonlinear analysis, since 25/05/2014)
- 2 Existence and stability of solutions for damped transmission system with varying delay, by S. Zitouni, A. Ardjouni, Kh. Zennir, R. Amiar (to Sbornik Mathematics, since 06/03/2015)
- 3 General decay of solution for coupled system of viscoelastic wave equations of Kirchhoff type with density in R^n , by Khaled ZENNIR, Abbas Benaissa and Abderrahmane Beniani (to EJTDE, since 01/05/2015)

- 4 Existence and fast decay of solution for viscoelastic wave equation of Kirchhoff type with nonlinear source in R^n , by Khaled ZENNIR (to Indagationes Mathematicae, since 07/11/2015)
- 5 Existence and fast decay of solution for viscoelastic wave equation with nonlinear source in R^n , by Khaled ZENNIR (to Journal of Applied Mathematics and Computing, since 07/11/2015)
- 6 Viscoelastic wave equation with logarithmic nonlinearities, by Khaled ZENNIR (to Acta Mathematica Vietnamica, since 15/11/2015)
- 7 Logarithmic nonlinearities for viscoelastic wave equation of Kirchhoff type, by Khaled ZENNIR (to Journal of Mathematical Analysis and Applications, since 15/11/2015)

Papers in preparation

- 1 On the existence of higher-order solutions of system for a Gierer-Meinhardt model
- 2 Stabilization of Bresse system with delay (with Lamine Bouzettouta)
- 3 Energy decay result for a nonlinear wave p -Laplac equation with a delay term acting in dynamic boundary conditions
- 4 Existence and stability of a damped wave equation with two delayed terms in boundary (with zitouni salah)

Refereeing

Referee for international journal:

1. Mathematical Methods in the Applied Sciences

Theses Supervision

| | |
|--|---|
| Second advisor of the PhD thesis | Zitouni Salah, University Badji Mokhtar, Annaba, Algeria. Title: " Study of existence/nonexistence and behavior of solutions for some evolution problems". since 2012 |
| Second advisor of the PhD thesis | Bouzettouta Lamine, University Badji Mokhtar, Annaba, Algeria. Title: " Existence and Asymptotic behavior for damped Bresse system". since 2013 |
| Second advisor of the PhD thesis | Kassah Laouar Lakhdar, University Constantine 1, Algeria. Title: " Existence and Asymptotic profiles for a problem of wave equation with strong damping". since 2014 |
| Second advisor of the PhD thesis | Abou ATIA Hiba, University 08 Mai 1945, Guelma, Algeria. Title: " Existence and stability for a system of nonlinear damped wave equations". since 2014 |
| Second advisor of Doctorate thesis (LMD) | KAREK Mohamed, University Badji Mokhtar, Annaba, Algeria. Title: " Asymptotic profiles for some problems of wave equations in the Fourier spaces". since 2014 |
| First advisor of Doctorate thesis (LMD) | Mouhssin Bayoud, University Badji Mokhtar, Annaba, Algeria. Title: " Qualitative studies of some dissipative systems for partial differential equations of evolution-type.". since 2015 |

Professional experience

Supervision- Licence thesis (BAC+3 years) in mathematics of:

- June 2011 BELKHEIR Imane, Department of Mathematics, University of sciences and technology Mohammed BOUDIAF of Oran, USTO, Algeria. Title: " Fixed point theorems and its applications ".
- June 2012 BAYOUD Mouhssin, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title: " The study of some evolution equations, wave equation".
- June 2012 MEKSSI Soumia, Department of Mathematics, University of sciences and technology Mohammed BOUDIAF of Oran, USTO, Algeria. Title: " The study of some evolution equations, heat equation"
- June 2013 KAOUANE AbdelAli, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "Sobolev spaces and distribution"
- June 2013 BOULBIBANE Besma, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "Hilbert spaces"
- June 2014 Bouhali Amina, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "Existence of solution for semilinear wave equation"
- June 2014 Khanchoul Amina, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "Compacity methode"
- June 2014 Taleb Amina, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "On the heat equation"

Supervision- Master thesis (BAC+5 years) in mathematics of:

- June 2014 BOURRICHE HOUDA and BOULECHFAR SELMA, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "On the existence and decay of solutions for some dissipative wave equations"
- 2014/2015 BOUSSOKTA SOMIA and KRIKA AHLAM, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : "On the degenerate wave equations- p -Laplacian operator"
- 2014/2015 BEDJAOUI SARA and MESKINE ILHEM, Department of Mathematics, University 20 Août 1955, SKIKDA, Algeria. Title : " Existence and decay of solution for coupled system of viscoelastic wave equations"

COURSES TAUGHT AT:

Al Qassim University, KSA.

- Since September 2015 Department of mathematics, Faculty of sciences and Arts, Ar Rass, - Vector calculus MATH.204. - Differential and Integral Calculus MATH.203. - Complex analysis MATH.484. - Differential equations MATH.313

University 20 Août 1955, SKIKDA, Algeria

- September 2012-August 2015 - Numerical Analysis for L2 Sciences -Optimisation for M2 Sciences -Maths 01 and 02 for L1 sciences - Mathematical physics equations for L3 mathematics -Introduction in distributions for L3 mathematics

University of sciences and technology Mohammed BOUDIAF of Oran, Algeria

March 2009-September 2012 - Numerical Analysis for L2 Mathematics- L2 Chemical- Probability and statistics for L2 Chemical sciences

Preparatory School of Science and Technology of Oran, Algeria

Septembre 2010-Jun 2011 Preparatory School of Science and Technology of Oran, Algeria- Numerical Analysis for L2 - Algebra 01,02 and Analysis 01,02 for L1

Pedagogical Productions

2014 A pedagogical Production (Lecture Notes) as a course material available to students of the third year Licence mathematics titled "Equations of mathematical physics" validated by three reports expertise with favorable opinion and the council scientific of Faculty of Science, University 20 Août 1955, Skikda, Algeria.

Administration

Since February 2013 Assistant of department chief of mathematics, faculty of sciences, university 20 Août 1955 of Skikda, Algeria

2014-2017 Member of Equal Committee Members of masterful teachers of the 20 Août 1955 University, Algeria.

References professors

Pr. SISSAOUI Hocine Laboratory of numerical analysis, optimization and statistics, University Badji Mokhtar, Annaba, Algeria. (My first supervisor of magister's thesis)

Pr. BENAÏSSA ABBES Laboratory of analysis and control of partial differential equations, University Djillali liabes, Sidi Bel Abbes, Algeria. (My supervisor of PhD thesis)

Dr. SAÏD-HOUARI Belkacem King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia. (My second supervisor of magister's thesis)

Dr. GUESMIA Amar University 20 Août 1955, Skikda, Algeria. (My supervisor of graduate studies)

Stays

2011/2012 Invited for one month to laboratory of Analysis, Topology and Probability, UMR 6632, centre of Mathematics and informatics at university of Aix-Marseille, French. By: Pr. Jerome LOS.

2013/2014 Invited for one month to laboratory of mathematics, informatiques and applications, University Haute-Alsace, Mulhouse, French. By: Pr. Bernard Brigui.

Skills

1. Programming language: Turbo Pascal, Matlab, FreeFem, Scilab, Lapack.
2. Office automation: MS Office XP, Word, PowerPoint, Excel, SWP and La TeX.
3. Founder and member of the Association of the Young Algerian Researchers in Technologies, information and Communication (AJCATIC).

Languages knowledge

Arabe **Native,**
Frensh **Fluent,**
English **Very Good**