

# Abdelouahed EL KHALIL

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## EDUCATION

- May 1999 PhD. in Applied Nonlinear Analysis, Faculty of Sciences Dhar-Mahraz, Fez, Morocco.
- June 1996 High Studies Diploma in Nonlinear Analysis, Faculty of Sciences Dhar-Mahraz, Fez, Morocco
- June 1994 MSc. In Applied Mathematics, Faculty of Sciences Dhar-Mahraz, Fez, Morocco (June 1994).

## RESEARCH INTERESTS

Applied Analysis; Boundary Value Problems and Nonlinear PDEs; Bifurcation Phenomena; Nonlinear Resonance; Spectral Theory; Topological and Variational Methods; Viscosity Solutions Theory; Finite Element Method, Discrete Potential Analysis.

## EMPLOYMENT

- Associate Professor of Mathematics, Al-Imam University, College of Sciences, Riyadh. November 2011 to date.
- Assistant Professor of Mathematics, Al-Imam University, College of Sciences, Riyadh. 2007-2011;
- Assistant Professor of Mathematics at Polytechnic School of Montreal, Canada. 2003-2006;
- Assistant Professor of Mathematics at Faculty of Sciences Dhar-Mahraz, Fez, Morocco: 1999-2003;
- Lecturer at Faculty of Sciences & Technology Sais, Fez, Morocco: 1997/1998.

## SELECTED PUBLICATIONS

- 1)** A. El Khalil, M.D.M. Alaoui, and A. Touzani: On the  $p$ -biharmonic operator with critical Sobolev exponent, *Appl. Math. (Warsaw)* 41 (2014), 229-237. doi:10.4064/am41-2-10.
- 2)** A. El Khalil, M.D.M. Alaoui, and A. Touzani: On the spectrum of the  $p$ -biharmonic operator involving  $p$ -Hardy's inequality, *Appl. Math. (Warsaw)* 41 (2014), 239-246 doi:10.4064/am41-2-11
- 3)** A. El Khalil, M.D.M. Alaoui, and A. Touzani: On the  $p$ -Biharmonic Operator with critical Sobolev exponent and nonlinear Steklov Boundary condition, Volume 2014 (2014), Article ID 498386, 8 pages. <http://dx.doi.org/10.1155/2014/498386>
- 4)** A. El Khalil: On a Class of PDE Involving  $p$ -Biharmonic Operator, *ISRN Mathematical Analysis*, Volume 2011 (2011), Article ID 630745, 11 pages doi:10.5402/2011/630745.
- 5)** El Khalil: On the spectrum of a class of strongly coupled  $p$ -Laplacian systems, *Journal of Partial Differential Equations (JPDE)*, Vol. 24 (2011), pp. 195-206
- 6)** A. El Khalil: S. Kellati and A. Touzani, On the principal frequency curve of the  $p$ -biharmonic operator, *Arab Journal of Mathematical Sciences* (2011), 17, 89–99.
- 7)** A. El Khalil: On the principal eigencurve of a coupled system, *Recent Developments in Nonlinear Analysis*, World Scientific (2010), pp. 43-53.
- 8)** L. Bougoffa, A. El Khalil: and S. El Manouni: Some results on strongly nonlinear anisotropic differential equations. *Applicationes Mathematicae*, (Warsaw) 37, 3 (2010), pp. 375-386.
- 9)** A. El Khalil, S. El Manouni and M. Ouanan: : Perturbed nonlinear degenerate problems in  $\mathbb{R}^N$  *Applicationes Mathematicae* (Warsaw) 36 (2009), 213-223.
- 10)** A. El Khalil, S. El Manouni and M. Ouanan: On the Principal Eigencurve of the  $p$ -Laplacian: Stability Phenomena, On some nonlinear elliptic problems for the  $p$ -laplacian in  $\mathbb{R}^N$ , *NoDEA, Nonlinear Differential Equations and Applications*, 15(2008), pp. 295-307.
- 11)** A. El Khalil and M. Ouana: boundary eigencurve problem involving the  $p$ -Laplacian operator, *Electronic journal of Differential Equations*, Vol. 2008(2008), 78, pp. 1-13.
- 12)** A. El Khalil, S. El Manouni and M. Ouanan: On the Principal Eigencurve of the  $p$ -Laplacian: Stability Phenomena, *Canadian Mathematical Bulletin*, 49(2006), No. 3, pp. 358-370.
- 13)** A. El Khalil, S. Kellati and M. Touzani: A nonlinear boundary problem involving the  $p$ -Laplacian operator, *International Journal of Mathematical Sciences*, 10(2005), pp. 1525-1537.

- 14)** A. El Khalil; S. El Manouni and M. Ouanan: Simplicity and stability of the first eigenvalue of a nonlinear elliptic system, *Int. J. Math. Math. Sci.* 2005, No.10, 1555-1563 (2005).
- 15)** A. El Khalil, P. Lindqvist, and A. Touzani, On the stability of the eigenvalue of  $\Delta_p u + g(x)|u|^{p-2}u = 0$ , with varying  $p$ , to appear in *Rendiconti di Matematica, Serie VII* Volume 24, Roma (2004), pp. 321-336.
- 16)** A. El Khalil and M. Ouanan, A global bifurcation result of a Neumann problem with indefinite weight, *Electronic Journal of Qualitative Theory of Differential Equations (EJQTDE)*, 09 (2004), pp. 1-14.
- 17)** A. El Khalil, M. Ouanan and A. Touzani, Bifurcation of a nonlinear elliptic system from the first eigenvalue, *Electronic Journal of Qualitative of Theory Differential Equations*, No. 23) (2003), pp. 1-18.
- 18)** A. El Khalil and A. Touzani, On the first eigenvalue of the  $p$ -Laplacian, *Partial Differential Equations, Lecture Notes in Pure and Applied Mathematics*, Vol. 229 (2002), pp. 195-205.
- 19)** A. El Khalil, M. Ouanan and A. Touzani, Existence and regularity of positive solutions for an elliptic system, *Electronic Journal of Differential Equations (EJDE)*, Conference 09 (2002), pp. 171-182.
- 20)** A. El Khalil, S. Kellati and A. Touzani, On the spectrum of  $p$ -biharmonic operator, *Electronic Journal of Differential Equations (EJDE)*, Conference 09 (2002), pp. 161-170.
- 21)** P. Drabek, A. El Khalil and A. Touzani, A bifurcation problem for the principal eigencurve of  $p$ -Laplacian, *Applicable Analysis*, Vol. 72 (3-4) (1999), pp. 399-410.
- 22)** P. Drabek, A. El Khalil and A. Touzani, A result on the bifurcation from the principal eigenvalue of  $A_p$ -Laplacian, *Abstract and Applied Analysis*, Vol. 2, Nos. 3-4 (1997), pp. 185-195.

## PROFESSIONAL TRAINING

- Training program on " program and Courses Specifications", Riyadh, 22-34/ 1435H – 22-24/4/ 2014, Akl-Nafie Center for counseling and training.
- Workshop on: "Critical Thinking and Problem Solving", 26-29 Jumada I 1432H., ACER & Al-Imam university.
- Strategic Planing in Academic Institutions, Al-Imam Muhammed Ibn Saud Islamic University, 28-30/11/1428H.
- Building a World Class Program, Prince Naif Institute for Research and Consulting Services, 25-28/12/1430H.
- Project Management with using Microsoft Project Program, Prince Naif Institute for Research and Consulting Services, March 6-17, 2010, Riyadh.