Curriculum Vitae

Dr. Marwan Aloqeili
Associate Professor of Mathematics

Address:
Department of Mathematics
Bir Zeit University
P.O. Box 14 Birzeit
Tel.: + 972 2 298 2144
Fax.: + 972 2 298 20 84
e-mail: maloqeili@birzeit.edu

Personal:
Date and place of Birth: Oct, 3rd 1972 at Hebron-Palestine.
Nationality: Palestinian.

Academics:

- **1997/1998-1999/2000** Ph.D. Student, University of Paris-Dauphine, Paris. Graduated in June 2000 with Distinction (Mention très honorable avec félicitation). Thesis' title "Using Exterior Differential Calculus in Consumer Theory". Advisor: Professor Ivar Ekeland.
- **1996/1997**: DEA (Diplôme d'Etudes Approfondies), the Master equivalent in France, in Applied Mathematics, University of Paris-Dauphine.
- **January 1996-June 1996**: Courses in French Language, University of Nancy II, Nancy, France.
- **1991/92-1994/95**: B.S., Mathematics (with distinction), with miner in Computer Science, Birzeit University.

Scholarship and Academic Visits:

- July 2012, visiting assistant professor, Université Paris-Dauphine.
- September 2010, visiting assistant professor, Université Paris-Dauphine.
- November 2004 One month visit to the University of Every Val d'Essonne, Evry, France.
- 1997-2000 Four years scholarship from the French Consulate in Jerusalem to prepare the Master and Ph.D. degrees.

Courses Studied in Master: Exterior Differential Calculus, Stochastic Calculus, Differential Game Theory, Theory of interest rate, Organizations Theory, Microeconomics of Insurance, Contract Theory, .

Professional and Non-Academic Experience:

- **2012/2013 - present**: Associate professor. Department of Mathematics-Birzeit University, Palestine.
- **2000/2001 - 2011/2012**: Assistant professor. Department of Mathematics-Birzeit University, Palestine.
- **2008/2009-2010/2011** Chairman of the department of Mathematics, Birzeit University.
- **September 2002/2003-2004/2005**: Assistant to the chairman of mathematics department.
- **1998/1999 - 1999/2000** Teaching Assistant (Vacataire) in the department of Administration and Applied Economics, University of Paris-Dauphine, Paris.
- **October 1995-January 1996** Teaching Assistant in the Department of Mathematics, Birzeit University, Palestine.

Conferences, Workshops and Summer Schools:

(1) **September 6th-September 9th, 2017** Workshop on Open Access Repositories and Data Management, Parma University, Parma, Italy.

(2) **July,** 31^{st}**-August** 2^{nd}**, 2016** The Fifth Palestinian Conference on Modern Trends in Mathematics and Physics, AAUJ, Jenin. Talk title, Lie derivative and Integrability of Homogeneous Differential Forms.

(3) **July, 16-18, 2012** The Third Palestinian conference on Modern Trends in Mathematics and Physics, PPU, Hebron. Talk title: An inverse problem arising from economics.

(4) **August, 9 - August, 12, 2000** The Third Palestinian International Mathematical Conference, Birzeit, Palestine.

(5) **August, 19 - August, 23, 1998** The Second Palestinian International Mathematical Conference, Birzeit, Palestine.

(6) **July, 2 - August, 3, 1998** Thematic Summer in Mathematical Economics and Finance, Vancouver, Canada.

(7) **April, 15 - May, 3, 1996** First School on Nonlinear Functional Analysis and Applications to Differential Equations, Trieste, Italy.

Fields of Interest:

- Microeconomics.
- Dynamic Macroeconomics.
- Optimization.
- Difference Equations.

Research Projects:

- Al-Maqidis project from French Consulate in Jerusalem with I. Ekeland and G. Carlier. Amount of project 8000 Euros.

- Two Research projects, Birzeit University. Amount of projects 8200 USD.

Languages:

- Arabic (Mother tongue).
- English.
- French.

Master Thesis Supervision

1. A. Awawdeh. Thesis Title: Dynamics of Higher Order Difference Equations.
2. A. El-Barmeel. Thesis Title: Bifurcation of Applied Dynamic Models.
3. Nuha Masarweh. Thesis Title: An Inverse Problem in Convex Optimization.
4. A. Shareef. Thesis Title: Dynamics and Bifurcation of Higher Order Difference Equations.
5. W. Yaseen, Thesis Title, Using Symmetry Methods to Solve some Difference Equations.
6. K. Badran, Dynamics and Forbidden sets of some difference equations.
7. S. Abualrob, Dynamics and Stability of some systems of difference equations.
8. I. Nazzal, Lie symmetry of differential and difference equations.

Publications:

1. Collective demand functions with price dependent income, in Progress.
2. with S. Abualrob, Dynamics of the system of difference equations $x_{n+1} = A + \frac{y_{n-k}}{y_n}, \quad y_{n+1} = B + \frac{x_{n-k}}{x_n}$, Submitted.
3. The characterization of demand and excess demand functions, Revisited, Submitted.
4. with A. Shareef, Neimark-Sacker bifurcation of a third order difference equation, Fundamental Journal of Mathematics and Applications, 2(1), 40-49, 2019.
5. with A. Shareef, Neimark-Sacker bifurcation of a fourth order difference equation. Mathematical Methods in the Applied Sciences, 41 (13), 5190-5202, 2018.
6. with N.Masarweh, Inverse problem in convex optimization with linear homogeneous constraints, Journal of Convex Analysis, 25 (3), 717-736, 2018.
7. with A. Awawdeh, Dynamics of non autonomous difference equation, Journal of Applied Mathematics and Computing, 55, 279-291, 2017.
8. The inverse problem in convex optimization with linear constraints, ESAIM: Control, Optimization and Calculus of Variations, 23, 71-94, 2017.
9. with G. Carlier and I. Ekeland, Restrictions and identification in a multidimensional risk-sharing problem, Economic Theory, 56 (2), 409-423, 2014.
10. Characterizing demand functions with price dependent income. Mathematics and Financial Economics, 8, 135-151, 2014.
11. Global stability of a rational symmetric difference equation. Applied Mathematics and Computation, 215, 950-953 (2009).
12. On the difference equation $x_{n+1} = \alpha + \frac{x_n^p}{x_{n-1}^p}$. Journal of Applied Mathematics and Computing, 25, 375-382, 2007.
13. Dynamics of a kth order rational difference equations. Applied Mathematics and Computation, 181, 1328-1335, 2006.
14. with M. Saleh, On the rational difference equation $y_{n+1} = A + \frac{y_n}{y_{n-k}}$. Applied Mathematics and Computation, 177, 189-193, 2006.
15. Dynamics of a rational difference equation. Applied Mathematics and Computation, 176, 768-774 (2006).
16. with M. Saleh, On the rational difference equation $y_{n+1} = A + \frac{y_n}{y_{n-k}}$, with $A < 0$. Applied Mathematics and Computation, 176, 359-363, 2006.
17. with M. Saleh, On the rational difference equation $y_{n+1} = A + \frac{y_{n-k}}{y_n}$. Applied Mathematics and Computation, 171, 862-869, 2005.
18. A note on excess demands with production. European Journal of Scientific Research, 1, 45-51, 2005.

19. On the characterization of excess demand functions. Economic Theory, 26, 217-225, 2005.

20. The Generalized Slutsky Relations. Journal of Mathematical Economics, 40/1-2, pp 71-91, 2004.

21. On the Integrability of Generalized Demand functions. Proceedings of the Third Palestinian International Mathematical Conference, Birzeit, Palestine, 2002.

22. Les Relations de Slutsky Généralisées, Les Comptes Rendus de l'Académie des Sciences de Paris, 330, serie I, 1045-1050, 2000.

Refereeing activity:
I have reviewed articles for many international journals: Computer and Mathematics with Applications, Discrete Dynamics in Nature and Society, Advances in Difference Equations, Applied Mathematics and Information, Journal of Mathematical Analysis and Applications, Applied Mathematics Letters, Taiwanese Journal of Mathematics, Novi Sad Journal of Mathematics, Fasciculi Mathematici, Opuscula Mathematica, Mathematica Slovaca, Boletim da Sociedade Paranense de Matematica, Applied Mathematics and Computation, FILOMAT, Neural Computing and Applications, Advances in Difference Equations, Journal of the Egyptian Mathematical Society. I am also a reviewer for Mathreviews of American Mathematical Society (AMS).

Opinion:
La situation des mathématiciens en Palestine, Gazette des Mathématiciens, French Mathematical Society, number 101, July 2004.

Working Papers:

1. Using Lie derivative to characterize homogeneous functions.
2. A note on weak duality.
3. Testable implications of utility maximization, the excess demand case, A survey.

Courses Taught:

(a) Mathematics Courses:

1. Calculus I, II and III.(Math 141, 132, 231)
2. Linear algebra.(Math 234)
3. Optimization.(Math 336)
4. Differential Equations.(Math 331)
5. Complex variables.(Math 431)
6. Mathematical modeling. (Math439)
7. Research Methods. (Math 610) (Math Master Course)
8. Dynamical Systems (Math632) (Math Master Course)

(b) Mathematical Economics and Economics courses

1. Microeconomic Theory.(Maec 330)
2. Macroeconomic Theory.(Maec 331)
3. Economics of Information.(Math 438)
4. General Equilibrium and Public Choice.(Maec 333)
5. Financial Markets.(Maec 439)
6. Dynamic Macroeconomics.(Maec 432)
7. Mathematical Economics (Master course).(Econ 633)