

Dr. Adel Helal Al-rabtah

Associate Professor

Department of Mathematics and Statistics

Faculty of Science

Mutah University

Jordan



Personal

- **Place and Date of Birth:** Al-Dair, Madaba, Jordan. 1969
- **Nationality:** Jordanian
- **Sex:** Male
- **Marital Status:** Married. Two daughters, and two sons
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- **👤 :** Department of Mathematics and Statistics
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Education

- **Arizona State University** USA
Ph.D. in Mathematics. Numerical Analysis 1997 - 2002
– Title of Thesis: Algebraic Interpretation and Stability of Enslaved Finite Difference Schemes
- **Pittsburg State University** USA
M.Sc. in Mathematics 1995 - 1997
- **Mutah University** Jordan
B.Sc. in Mathematics 1987 - 1991
- **Ministry of Education** Jordan
High School Diploma 1987

Teaching Experiences

Associate Professor at Mutah University, Jordan	2015-Now
Associate Professor at King Faisal University, Saudi Arabia	2014-2015
Associate Professor at Mutah University, Jordan	2013-2014
Assistant Professor at Mutah University, Jordan	2003-2013
Teaching Associate at Arizona State University, USA	1997-2002
Mathematics Tutor at Arizona State University, USA	1997-2002
Teaching Assistant at Pittsburg State University, USA	1996-1997
High School Teacher, Jordan	1993-1995

Administrative Experiences

Director of Admission and Registration Unit, Mu'tah University.	2011-2013
Head of Department of Mathematics and Statistics, Mu'tah University.	2009-2010
Coordinator of Mathematics and Computer Science majors, Mu'tah University	2013-2014
Head of Department of Mathematics and Statistics, Mu'tah University	2005-2006
Head of Department of Mathematics and Statistics, Mu'tah University	2004-2005

Academic Committees

Member of Council of Mu'tah University	2011-2013
Member of several Committees concerning Students Admission, Mu'tah University	2011-2013
Member of Council of Faculty of Science at Mu'tah University	Many Years
Member of Scientific Research Committee, Faculty of Science, Mu'tah University	Many Years
Member of B.Sc. Mathematics Plan, Department of Mathematics and Statistics, Faculty of Science, Mu'tah University	Many Years
Member of B.Sc. Plan, Faculty of Science, Mu'tah University	Many Years
Member of most internal committees in the Department of Mathematics and Statistics, Mu'tah University	Many Years
Member of examination committees for graduate students, Mu'tah University	Several Times

Courses Taught At University Level

■ Mu'tah University, 2003-Present:

1. Math 729: Selected Topics In Numerical Analysis Graduate Level
2. Math 721: Numerical Analysis Graduate Level
3. Math 425: Computational Methods B.Sc. Level
4. Math 423: Numerical Analysis II B.Sc. Level
5. Math 323: Numerical Analysis I B.Sc. Level
6. Math 203: Differential Equations B.Sc. Level
7. Math 102: Calculus II B.Sc. Level
8. Math 101: Calculus I B.Sc. Level

■ King Faisal University, Saudi Arabia, 2014-2015:

1. Math 601: Numerical Analysis 1 Graduate Level
2. Math 412: Partial Differential Equations B.Sc. Level
5. Math 411: Numerical Analysis B.Sc. Level
7. Math 144: Calculus I B.Sc. Level

■ Arizona State University, USA, 1997-2002:

1. Math 210: Brief Calculus B.Sc. Level
2. Math 170: PreCalculus B.Sc. Level
3. Math 117: College Algebra B.Sc. Level
4. Math 106: Intermediate Algebra B.Sc. Level

■ Pittsburg State University, USA, 1996-1997:

1. Math 117: College Algebra B.Sc. Level
2. Math 106: Intermediate Algebra B.Sc. Level

Computer Skills

- Mathematical Softwares: Matlab, Maple, Mathematica, Fortran.
- Operating Systems: Windows, Linux, Unix, Mac.
- Typesetting Softwares: LaTeX, Microsoft Word.
- MUCDL: Mu'tah University Computer Driving License.
- The Skills of Using Excel.

Publications

1. Adel Al-rabtah, Vedat Suat Ertürk, and Shaher Momani. Solutions of a fractional oscillator by using differential transform method. *Computers and Mathematics with Applications*, 59 (2010) 1356-1362.
2. Adel H. Al-rabtah. A New Iterative Method For Solving Linear Systems Of Equations. *Jordan Journal of Mathematics and Statistics (JJMS)* 5(3), 2012, pp.169-184.
3. Adel Al-rabtah, Shaher Momani, and Mohamed A. Ramadan, Solving Linear and Nonlinear Fractional Differential Equations Using Spline Functions. Hindawi Publishing Corporation, *Abstract and Applied Analysis*, Volume 2012, Article ID 426514, 9 pages, doi:10.1155/2012/426514.
4. Adel H. Al-rabtah. Solving Systems of Linear and Nonlinear Fractional Differential Equations using Spline Functions. *Mu'tah Lil-Buhuth wad-Dirasat*, Vol.28, No.1, 2013, pp.43-60.
5. Alaa A. Ibrahim, Omar K. Jaradat, Adel H. Al-rabtah. Exact Solitary and Periodic Solutions for Nonlinear Partial Differential Equations using Exponential Function Method. *Mu'tah Lil-Buhuth wad-Dirasat*, Vol.28, No.1, 2013, pp.25-42.

6. Salah Abuasad, Saleh Alshammari, Adil Al-rabtah, and Ishak Hashim. Solving a Higher-Dimensional Time-Fractional Diffusion Equation via the Fractional Reduced Differential Transform Method. *Fractal and fractional*, Vol 5(4), 168, 2021.
7. Adel Al-rabtah and Salah Abuasad. Effective Modified Fractional Reduced Differential Transform Method for Solving Multi-Term Time-Fractional Wave-Diffusion Equations. *Symmetry* 2023, Vol. 15(9), 1721.
8. Adel Al-rabtah and Kamal Al-Banawi. Vertices of Ovals with Constant Width Relative to Particular Circles. *Mathematics* 2023, Vol. 11(19), 4179.

References

1. Prof. Shaher Mohammad Momani. Department of Mathematics, Jordan University, Jordan.
2. Prof. Abdelrahim A. Hunaiti. Former president of many universities in Jordan.