Dr. Ayat A. Ababneh

Curriculum Vitae

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Personal Information

- Citizenship: Jordanian.
- Marital Status: Married; Mother of three children.
- Place of Residence: Amman, Jordan.

Education

- **Ph.D. in Mathematics (2018-2022), The Ohio State University, Columbus, OH.**
  Area of study: Stochastic Algebraic Topology.
  Dissertation title: *Homology of Gaussian Random Chains* (Advisor: Prof. Matthew Kahle).
- **M.Sc. in Mathematics (2008-2010), Yarmouk University, Jordan.**
  Area of study: Mathematical Analysis.
  Thesis title: *Simultaneous Farthest Points in Vector Valued Function Spaces*.
- **B.Sc. in Mathematics (2004-2008), Yarmouk University, Jordan.**
  My bachelor's, master's, and doctoral GPAs are all excellent.

Positions Held

- Assistant Professor (2022-present), Mathematics Department, The University of Jordan, Amman, Jordan.
- Research Assistant (2019-2022), Mathematics Department, The Ohio State University, Columbus, OH.
- Teaching Assistant (2018-2019), Mathematics Department, The Ohio State University, Columbus, OH.
- Full-time Lecturer (2014-2018), Mathematics Department, The University of Jordan, Amman, Jordan.
- Full-time Lecturer (2010-2014), Mathematics Department, Yarmouk University, Irbid, Jordan.

Research Interests

- Main Interests: Algebraic topology, stochastic topology, combinatorial topology.
- Other Interests: Configuration spaces, Jordan algebras, approximation, optimization.

Articles

- A. Ababneh, M. Kahle. Maximal persistence in random clique complexes. To appear in *Journal of Applied and Computational Topology*. DOI: 10.1007/s41468-023-00131-y (2023).
- Sh. Al-Sharif, A. Ababneh, M Al-Qahtani. Best coapproximation in certain metric spaces. *Jaen journal on approximation*, 11(1), 91–100 (2019).
- B. Alzalg, K. Badarneh, A. Ababneh. Infeasible interior-point algorithms for stochastic second-order cone optimization. *Journal of Optimization Theory & Applications*, 181(1) 324–346 (2019).
- A. Ababneh, Sh. Al-Sharif, J. Jawdat. Simultaneous farthest points in vector valued function spaces. *Nonlinear Functional Analysis and Applications*, 16(1) 63–77 (2011).
- B. Alzalg, K. Tamsaouete, L. Benakkouche, A. Ababneh. The Jordan algebraic structure of the quadratic rotated cone. Submitted for publication.

Committee Memberships and Services at the University of Jordan

- Secretary-General of the Mathematics Departmental Council, 2022/2023.
- Member of the Departmental Website Committee, 2022/2023.
- Member of the Departmental Library Committee, 2022/2023.

CONFERENCES AND WORKSHOPS

- The 2023 SIAM Conference on Applied Algebraic Geometry. Eindhoven, the Netherlands, 10–14, Jul. 2023. Presented a talk titled "Maximal persistence in random clique complexes".
- Midwest Arithmetic Geometry and Number Theory Series 2019. The Ohio State University, Columbus, OH. Oct. 12–13, 2019.
- Junior Geometry and Topology in the Midwest. University of Wisconsin, Madison, WI. Oct. 13, 2018.
- Operational Research Practice in Africa. University of Science and Technology – Houari Boumediene in Algiers, Algeria. Apr. 19–23, 2015.

TEACHING EXPERIENCE

Below is a list of courses that I have taught. Responsibilities in most of these course included all aspects of teaching the course, including developing course materials/syllabus, creating specific assignments, preparing slide lectures, writing and administering exams, performing classroom instruction, lecturing, and grading. English is the language of instruction at the schools listed below.

INSTITUTION AND LOCATION	COURSES TAUGHT
The University of Jordan Amman, Jordan (2014-2018, & 2022-present)	MATH 361: Topology I MATH 202: Engineering Mathematics I MATH 201: Calculus III MATH 102: Calculus II MATH 101: Calculus I MATH 103: Mathematics for Business
The Ohio State University Columbus, Ohio (2018-2019)	MATH 1151: Calculus I (Course instructor) MATH 2568: Linear Algebra (Course tutor) MATH 2255: Differential Equations (Course tutor)
Yarmouk University Irbid, Jordan (2010-2014)	MATH 241: Linear Algebra I MATH 203: Ordinary Differential Equations I MATH 252: Discrete Mathematics for IT MATH 102: Calculus II MATH 101: Calculus I

HONORS AND AWARDS

- Research assistantship with full tuition waiver and stipend, Mathematics Department at The Ohio State University (2019-2022).
- Teaching assistantship with full tuition waiver and stipend, Mathematics Department at The Ohio State State University (2018/2019).
- Full scholarship from the University of Jordan to study Ph.D. in Algebraic Topology (2018-2022).
- First class honors in Mathematics, M.Sc. degree, Yarmouk University (2010).
- Dean's list of excellence for outstanding academic records, Yarmouk University (2004– 2008).
- Some travel and accommodation awards to attend in international events/workshops.

RESEARCH PROFILES AT UNIVERSAL IDENTIFIERS

- **On Google Scholar**: *https://scholar.google.com.pk/citations?user=XZuAMCcAAAAJhl=en*
- **On Research Gate**: *https://www.researchgate.net/profile/Ayat-Ababneh*

ASSOCIATION MEMBERSHIPS

- American Mathematical Society.
- Mathematical Association of America.

COMPUTER SKILLS

- Comfortable with C, C++, Sage, MAPLE.
- Familiarity with LaTeX– Overleaf.

REFERENCES

References are available upon request.