Malak Mohammad Kheir Dally
Department of Mathematics and Computer Science
Beirut Arab University
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Education

- **PhD in Mathematics** April 2020
  Faculty of Science, Beirut Arab University
  Thesis Title: On a Class of Irreducible Representations of the Braid Group
  Supervisor: Prof. Mohammad Abdulrahim

- **Masters in Mathematics** June 2014
  Faculty of Science, Beirut Arab University
  Thesis Title: Multi-parameter Representations of the Braid Group B_3
  Supervisor: Prof. Mohammad Abdulrahim

- **Bachelor Degree in Mathematics** June 2011
  Faculty of Science, Beirut Arab University
  Overall Grade Point Average: 3.89/ 4.0
  Degree: Excellent

Experience

- **Assistant Professor** September 2026 - Present
  Beirut Arab University, Bekaa Campus
  Faculty of Science

  Courses
  - Business Math
  - Linear Algebra
  - Calculus
  - Calculus and Analytical Geometry

- **Lecturer** September 2024- June 2026
  Beirut Arab University, Bekaa Campus
  Faculty of Science

  Courses
  - Business Math
  - Business Statistics
  - Linear Algebra
  - Calculus
  - Differential Equations
  - Numerical Methods

- Probability and Statistics
- Discrete Structures I

- **Lecturer**
  Antonine University January 2023- June 2026
  Faculty of Engineering and Computer Science

  Courses
  - Algebra II
  - Algebra I
  - Calculus I
  - Calculus II
  - Calculus III
  - Linear Algebra
  - Discrete Mathematics
  - Operation Research

- **Lecturer**
  Lebanese International University January 2022- June 2026
  Colleges of Business Administration, Engineering, and Science

  Courses
  - Operations Management
  - Quantitative Methods for Business Decisions
  - Statistics for Decision Making (for Masters of Business Administration)
  - Introduction to Business Statistics
  - Calculus I
  - Calculus II
  - Linear Algebra
  - College Algebra

- **Coordinator**
  Lebanese International University January 2023-June 2026
  College of Business Administration

  Courses
  - Introduction to Business Statistics
  - Statistics for Decision Making (For Masters of Business Administration)

- **Lecturer**
  Rafik Hariri University September 2017 – December 2022
  College of Arts and Science and College of Business Administration

  Courses
  - Business Math
  - Business Statistics
  - Discrete Mathematics
  - College Algebra for Business and Arts

- Fundamentals of Algebra for Business and Arts
- Calculus I & II
- Ordinary Differential Equation
- Numerical Analysis
- Linear Algebra

- **Lecturer**
  Beirut Arab University, Bekaa Campus June 2017 – August 2017
  Faculty of Engineering

  Course
  - Probability and Statistics

- **Lecturer**
  Beirut Arab University, Beirut Campus February 2017 – June 2017
  Faculty of Health Science

  Course
  - Calculus and Analytical Geometry II

- **Lecturer**
  ULF University, Chtaura Campus February 2015 – June 2017
  College of Science and College of Engineering

  Courses
  - Linear Algebra
  - Probability and Statistics
  - Calculus I
  - Calculus II

- **Mathematics Teaching Assistant and Lab Instructor**
  Beirut Arab University September 2011 – February 2018

  Courses
  - Calculus and Analytical Geometry
  - Applied Mathematics
  - Dynamics of Particles
  - Differential Equations
  - Numerical Analysis
  - Linear Algebra
  - Dynamics of Rigid Bodies
  - Functions of Complex Variables
  - Special Functions
  - Abstract Algebra
  - Topology

- Topics in Abstract Algebra
- Measure Theory
- Functional Analysis
- Partial Differential Equations
- Probability and Statistics
- Operation Research
- Computational Methods

- **Computer Lab Instructor**
  - Acquired a wide knowledge in softwares such as Mathematica, Matlab, Megastat, and latex in many courses such as numerical analysis, operation research, mathematical computations, linear algebra, probability and statistics.

Publications

- Mohamad Y. Chreif, Malak M. Dally, Mohamad N. Nasser, Extensions of Braid Representations to the Universal Braid Group, 2026 (submitted)

- Mohamad Y. Chreif, Malak M. Dally, Wada-Type Representations of B_n And Their Extension to VB_n, 2026 (submitted)

- Mohamad Y. Chreif, Malak M. Dally, Mohamad N. Nasser, On Matrix Representations of the Virtual Singular Braid Monoid, 2026 (submitted)

- Mohamad Y. Chreif, Malak M. Dally, On the Irreducibility of the Extension of the Lawrence-Bigelow-Krammer Representation to the Virtual Braid Group VB_3, Journal of Knot Theory and its Ramifications, 2026

- Mohamad N. Nasser, Mohamad Y. Chreif, Malak M. Dally, Local Representations of the Flat Virtual Braid Group, Indian Journal of Pure and Applied Mathematics, 2026

- Mohamad Y. Chreif, Malak M. Dally, On the Irreducibility of Local Representations of the Braid Group B_n, Arabian Journal of Mathematics, Vol. 13, 2024

- Malak M. Dally, Mohamad Y. Chreif, Mohamad Balouza, Nisreen A. Abi Farraj, Effects of Budget Rules on Fiscal Policy and Economic Growth, Journal of Contemporary Research in Business Administration and Economic Sciences, 2023

- Malak M. Dally, Mohammad N. Abdulrahim, On the Unitary Representations of the Braid Group B_6, MDPI (Σ mathematics), Vol. 7, No. 11, 2019

- Malak M. Dally, Mohammad N. Abdulrahim, On the Faithfulness of Jones-Wenzl Representation of the Braid Group B_4, International Journal of Applied Mathematics, Vol. 32, No. 3, 2019

- Malak M. Dally, Mohammad N. Abdulrahim, On the Irreducibility of Perron Representations of Degrees 4 and 5, European Journal of Pure and Applied Mathematics, Vol. 11, No.1, 2018

- Malak M. Dally, Mohammad N. Abdulrahim, On the Irreducibility of Artin's Group of Graphs, Journal of Mathematics Research, Vol. 7, No.2, 2018

Awards

Awarded first place overall competing against undergraduate Math students “Jamal Abd El Nasser” award for scientific distinction.

Talks, Conferences, and Workshops

- Workshop on Representation Theory, Beirut Arab University, 2026
- On a Class of Irreducible Representations of the Braid Group, Beirut Arab University, 2019.
- On the Irreducibility of Perron Representations of Degrees 4 and 5, Beirut Arab University, 2018.
- Workshop, LSMS, University of Balamand, 2017.
- Conference on Algebra, Lie Groups and related topics, CAMS, American University of Beirut, 2014.
- Workshop on Financial Mathematics, Notre Dame, 2013.
- Conference on Number Theory, American University of Beirut, 2013.
- Conference, LSMS, Saint Joseph University, 2013.
- Workshop on Representation Theory, Beirut Arab University, 2012.
- Workshop on Modular Forms and related Topics, CAMS, American University of Beirut, 2012.

Languages

- Arabic (native language)
- English (fluent)

References

Prof. Mohammad Abdulrahim

Head of Department of Mathematics and Computer Science

Beirut Arab University

mna@bau.edu.lb