Yassine Ait Mohamed

yassine.ait.mohamed@usherbrooke.ca yassineaitmohamed.github.io Last updated: January 2026

Research interests

Derivation theory on graded rings, algebraic geometry, Lie groups and Lie algebroids, topological quantum field theories (TQFTs), shifted symplectic geometry, Poisson geometry.

Education

Ph.D. in Mathematics 2024–present
University of Sherbrooke, Sherbrooke, Canada
Thesis topic: Poisson structures, shifted symplectic geometry, Lie algebroids and groupoids
Advisor: Prof. Maxence Mayrand

Ph.D. Studies (first year) 2022–2023
Sidi Mohamed Ben Abdellah University, Fez, Morocco
Program: Noncommutative algebra
Advisor: Prof. Lahcen Oukhtite

M.Sc. in Mathematics 2020–2022
Sidi Mohamed Ben Abdellah University, Fez, Morocco
Divisors in Algebraic Geometry, Central Simple Algebras and Severi–Brauer Varieties
Advisor: Prof. Karim Mounirh

B.Sc. in Mathematics 2016–2020
Moulay Ismail University, Meknes, Morocco
The Spectrum and the Jacobson Radical in a Commutative Ring
Advisor: Prof. Chahrazade Bakkari

Publications

[1] Y. Ait Mohamed, *Degree-Preserving Derivations on Graded Rings and Modules.*
Submitted.

[2] Y. Ait Mohamed, *Generalized Homogeneous Derivations on Graded Rings.*

Siberian Mathematical Journal (to appear). arXiv:2412.17187

[3] Y. Ait Mohamed, *On Graded Rings with Homogeneous Derivations.*

Revista de la Unión Matemática Argentina. doi:10.33044/revuma.4934

Notes

[1] Y. Ait Mohamed, *Hamiltonian Spaces and Reduction for Lie Groupoids.*
[PDF]

[2] Y. Ait Mohamed, *Note on Central Simple Algebras and the Brauer Group.*
[PDF]

[3] Y. Ait Mohamed, *Note on Sheaf Theory.*
[PDF]

Master's thesis

Divisors in Algebraic Geometry, Central Simple Algebras and Severi–Brauer Varieties.
M.Sc. thesis, Sidi Mohamed Ben Abdellah University (2022).
[PDF]

Fellowships and awards

ISM Doctoral Scholarship 2024–2026

Guaranteed Doctoral Funding, University of Sherbrooke 2024–2028
National Doctoral Scholarship, Morocco 2022–2023
National Master's Scholarship, Morocco 2020–2022
National Undergraduate Scholarship, Morocco 2016–2020

Invited talks and seminars

[1] *Poisson Structures on 1-Shifted Coisotropics* November 2025
SAG Seminar, University of Sherbrooke

[2] *On Bound Quivers* November 2024
MAT728 – Selected Topics in Algebra, University of Sherbrooke

[3] *Generalized Homogeneous Derivations on Graded Rings* July 2023
Seminar on Noncommutative Algebra, Faculty of Science and Technology, Fez

[4] *On Graded Rings with Homogeneous Derivations* April 2023
Seminar on Noncommutative Algebra, Faculty of Science and Technology, Fez

[5] *On Graded Rings and Derivations* February 2023
Seminar on Noncommutative Algebra, Faculty of Science and Technology, Fez

[6] *On Graded Rings* January 2023
Seminar on Noncommutative Algebra, Faculty of Science and Technology, Fez

[7] *Tensor Algebra and Enveloping Algebra of a Lie Algebra* December 2021
Seminar on Geometry and Algebra, Faculty of Science, Dhar El Mahraz

[8] *On the Riemann–Roch Theorem* November 2021
Seminar on Geometry and Algebra, Faculty of Science, Dhar El Mahraz

[9] *Action of a Lie Group on a Smooth Manifold* February 2021
Seminar on Geometry and Algebra, Faculty of Science, Dhar El Mahraz

Teaching experience

University of Sherbrooke 2024–present

Analysis I (MAT129) Winter 2026
Elements of Algebra (MAT141) Fall 2025
Applied Linear Algebra in Computer Science (MAT199) Fall 2025
Linear Algebra (MAT253) Winter 2025
Differential and Integral Calculus I (MAT194) Fall 2024
Mathematics Help Center Fall 2024

Mathematics Tutor 2017-2023
Algebra, real and complex analysis, topology.
Private tutoring and teaching centers in Meknes and Fez, Morocco.

Languages

Tamazight (native), Arabic (fluent), French (intermediate), English (reading and writing).