

Maram Alossaimi  
Flat 701, Fitzwilliam House, 8 Milton Street, S1 4JU  
[maram.alosaimi@gmail.com](mailto:maram.alosaimi@gmail.com)

## Education

🎓 The [University of Sheffield](#), United Kingdom  
[2018–2022](#) | [PhD's degree](#)

Our research is about classified a special case of the Poisson algebra class  $A = (D; \alpha, \beta, c, u)$ , [Oh, 2006]. The case is the Poisson polynomial algebra in two variables  $x$  and  $y$  with coefficients in the Poisson polynomial algebra  $K[t]$  in one variable  $t$ . We classified the large Poisson algebra class  $A = K[t][x, y]$ , over an algebraic closure field  $K$  with zero characteristic. The classification consists of three main cases and each subcase has several subcases. We are interested in the Poisson spectra, maximal and minimal Poisson prime ideals for each subcase of the Poisson algebra class  $A$ . Therefore, we classify all the Poisson prime ideals for these subcases in order to study some properties of their Poisson algebras, Poisson enveloping algebras and some simple finite dimensional Poisson  $A$ -modules. I present the results, i.e. the containment of Poisson prime ideals for each subcase in diagrams. I presented this research in two posters (Poisson Algebras I) and (Poisson Algebras II). I have parctipated with this research in several conferences. This work has been done under the supervision of [Prof. Vladimir Bavula](#).

🎓 The [University of Manchester](#), United Kingdom  
[2016–2017](#) | [Master's degree in Pure Mathematics and Mathematical Logic](#)

Modules I took included Group Theory, [Set Theory](#), [Galois Theory](#), [Noncommutativ Algebra](#) and [Lie Algebras](#). I did a short project in the Mathieu group  $M_{24}$  and this work was done under the supervision of Prof. Peter Rowley. In my final term, I wrote my dissertation, classified some simple finite groups, in particaular, the Leech Lattice and Conway groups and this work was done under the supervision of [Prof. Peter Rowley](#).

🎓 The [University of King Saud](#), Saudi Arabia  
[2008–2012](#) | [Bachelor's degree in Mathematics](#)

Modules I took included Integral Calculus, Foundations of Mathematics, Computational Mathematics, Differential and Integral Calculus, Vector Calculus, Linear Algebra, Numbers Theory, Introduction to Ordinary Equations, Numerical Analysis, Analysis, Group Theory, Introduction to Topology, History of Mathematics, Rings and Fields, Introduction to Partial Differential Equations, Introduction to Graphs and Combinatorics, Real Analysis, Introduction to Differential Geometry, Complex Analysis and Analysis in Several Variables. In my final term, I wrote a short project on Topology.

## English Language qualifications

- I. I studied general English in various colleges in Manchester, UK, 2014–2015.
- II. I did a pre-sessional English course at [Manchester Metropolitan University](#), UK, 2015.
- III. I studied general English at the [University of Manchester](#), UK, 2015–2016.
- IV. I got 6 overall in IELTS exam, Manchester, 25 June 2016.
- V. I did pre-sessional English course for 20 weeks at the University of Manchester, UK, 2016.

## Participating in Conferences

- I. I presented my virtual poster with the title 'Poisson algebras' at the [British Mathematical Colloquium \(BMC\)](#) and the [British Applied Mathematics Colloquium \(BAMC\)](#) in the University of Glasgow, UK, 6–9 April 2021.
- II. I presented my virtual poster with the title 'Poisson algebras I' at the [Young Researchers in Mathematics conference](#) in the University of Bristol, UK, 7–9 June 2021.
- III. I presented my virtual poster with the title 'Poisson algebras I' at the [LMS Women in Mathematics](#) Day that was organised by the University of Strathclyde, UK, 16 June 2021.
- IV. I presented my virtual poster with the title 'Poisson algebras I' at the [Geoquant 2021, Geometry and Quantization](#) conferences in Freiburg University, Germany, 9–13 August 2021.
- V. I gave my virtual short talk with the title 'Poisson brackets and Poisson prime ideals in polynomial algebras' at the [XI International Conference of the Georgian Mathematics Union](#) in the Batumi Shota Rustaveli State University, Georgia, 23–28 August 2021.
- VI. I gave my virtual short talk with the title 'Polynomial Poisson Algebras' at the [10<sup>th</sup> International Eurasian Conference on Mathematical Sciences and applications](#) in Sakarya, Turkey, 25–27 August 2021.
- VII. I gave my virtual short talk with the title 'An Introduction in Generalized Weyl Poisson Algebras' at the [8<sup>th</sup> International Congress on Fundamental and Applied Sciences](#) in Antalya Bilim Univeristy, Turkey, 19–21 October 2021.
- VIII. I gave my virtual short talk with the title 'Poisson algebras and Iterated skew polynomial algebras' at the [First International Conference on Mathematics and Computation](#) in Rajkiya Engineering College Kannauj, India, 22–23 October 2021.
- IX. I gave my virtual short talk with the title 'Poisson algebras' at the [LMS Graduate Student Meeting](#) in London Mathematical Society, 8 November 2021.
- X. I gave my virtual short talk with the title 'Poisson algebras and Poisson prime ideals' at the [5<sup>th</sup> International Conference on Mathematics: An Istanbul Meeting for World Mathematicians](#) in Istanbul, Turkey, 1–3 December 2021.
- XI. I gave my virtual Poster presentation with the title 'Poisson Algebras II' at the [18<sup>th</sup> Mathematics Conference for Young Researchers](#) in Japan, Hokkaido University, 1–4 March 2022.

## Attending Conferences

- I. The British Mathematical Colloquium in the University of Lancaster, UK, 8–11 April 2019.
- II. The virtual British Young Mathematicians' Colloquium in the University of Birmingham, UK, 17 April 2019.
- III. The virtual [International Conference of Young Mathematicians](#) in the Institute of Mathematics of NAS of Ukraine, 3–5 June 2021.
- IV. The virtual [13<sup>th</sup> International Algebraic Conference in Ukraine](#) in Taras Shevchenko National University of Kyiv, Ukraine, 6–9 July 2021.
- V. The virtual [British Early Career Mathematicians Colloquium](#) in Birmingham University, UK, 15–16 of July 2021.
- VI. The virtual [Conference on Rings and Polynomials](#) in TU Graz, Graz, Austria, 19–24 of July 2021.
- VII. The virtual conference in celebration of the work of Bill Crawley-Boevey, 1–10 September 2021.
- VIII. The virtual [Young Algebraists' Conference](#) in EPFL, 6–10 September 2021.
- IX. The virtual Black Heroes of Mathematics Conference, 5–6 October 2021.
- X. The [Lie Theory and Poisson Geometry](#) Conference in the Centre International de Rencontres Mathématiques, Marseille, France 10–14 January 2022.

## Summer schools and Workshops

- I. The virtual [Geoquant 2021, Geometry and Quantization](#) in Freiburg University, 2–6 August 2021.
- II. The virtual [K-Theory and Representation Theory](#), 19–23 July 2021.
- III. The virtual [finite and infinite-dimensional meeting on Lie groupoids, Poisson geometry and integrability](#) workshop, 16–20 August 2021.
- IV. The [power of women in deep learning](#) workshop in Isaac Newton Institute, Cambridge from 22–23 November 2021. Also, I presented my poster with the title 'Poisson algebras'.

## Attending online workshops at the University of Sheffield

- I. Effective Online Presentations, 14 Jan 2021.
- II. Coaching Stressed, 25 Jan 2021.
- III. Online Presenting, 1 June 2021.
- IV. STA Lecturing, 8 June 2021.

- V. STA Research Supervision, 23 June 2021.
- VI. STA Assessment and Feedback, 7 July 2021.
- VII. Foundation Pathway Orientation, 27 September 2021.
- IX. STA Teaching Design and Delivery, 7 October 2021.

## Awards

- I. I was awarded by the University of King Saud several times during my Bachelor's degree for my distinguish in my studies, 2009–2012.
- II. I was awarded by the [Saudi Arabia Cultural Bureau](#) in London for my distinguish in Master's degree, 2016–2017.
- III. I was awarded as the second winner by my virtual poster with the title 'Poisson algebra I' at the [Young Researchers in Mathematics conference](#) that was organised by the [University of Bristol](#), UK, 7–9 June 2021.
- IV. I was awarded because I participate with my virtual poster with the title 'Poisson algebra I' at [LMS Women in Mathematics](#) Day that was organised by the University of Strathclyde, UK, 16 June 2021.
- V. I was awarded by presenting my virtual short talk with the title 'Poisson algebras and Iterated skew polynomial algebras' at the [First International Conference on Mathematics and Computation](#), 22–23 October 2021.
- VI. I was awarded twice by the [Saudi Arabia Cultural Bureau](#) in London for my distinguish in PhD's degree in 2021 and 2022.



## Current and Future Research Interests

When I was a graduate student I was interested in Algebra, in particular Field and Ring theories, but after I did my Master's degree and I studied Non-commutative algebras and Lie algebras courses, I was keen on them. I am interested in Lie algebras and Poisson algebras. However, what I found in my journey is that Algebra, Geometry and Topology are related to each other. In my opinion, a concept can be shifted, reflected and better understood from one area to another easy and you will be able to see and understand it in more make sense. Moreover, people like Mathematics if they understand it or if Mathematics has meaning in their lives, i.e. applications in Physics. Therefore, I plan to build up my background in Geometry and Topology after I finish my PhD's degree if I want to do further research in Non-commutative Algebra.

## Research skills

[L<sup>A</sup>T<sub>E</sub>X](#). Writing in Latex.

- ⌚. Time managing.

-  Hard worker.
-  Solving problems.

## Experience

- I. I taught at the University of Imam Mohammad Ibn Saud, 2013–2014 and 2017–2018.
- II. I have given tutorial classes in MAS003, MAS004, MAS114 and MAS156 at the University of Sheffield, 2019–2021.
- III. I have done marking in MAS004, MAS114 and MAS211 at the University of Sheffield, 2019–2021.
- IV. I did review for a paper at the 5th International Conference on Mathematics and Statistics (ICoMS 2022) in Paris, France, 17–19 June 2022.

## Employment

I am a lecturer in Mathematics and Statistics department, Science college at the University of Imam Mohammad Ibn Saud in Saudi Arabia since 2014.

## Scholarships/Sponsorships

- I. I got a scholarship from the University of Imam Mohammad Ibn Saud in Saudi Arabia to study my Master's degree at the University of Manchester, UK, 2016–2017.
- II. I have gotten a scholarship from the University of Imam Mohammad Ibn Saud in Saudi Arabia to study my PhD at the University of Sheffield, UK, 2018–2022.

## Membership

- I. I am a member of the Hong Kong Chemical, Biological and Environmental Engineering Society (HKCBEES) since 15 October 2021.
- II. I am a member of the Society for Industrial and applied mathematics (SIAM) 2021–2022.
- III. I am a member of the Institute of Mathematics and its Applications from October 2021 to January 2022.
- IV. I am a member of the London Mathematical Society (LMS) since 21 November 2021.

## Future plan

I am going back to teach and use my experience to help education development at the university of Imam Mohammad Ibn Saud. I am going to focus on publishing papers, organise and involve in Mathematics conferences in/out of Saudi Arabia. The main aim in my career will be improving

knowledge and delivering teaching in high quality of Mathematics in the Saudi Arabia education. Also, I would like to improve my formal Arabic Language and know more about the history of Languages.

## Hobbies and Interests

✈. Travelling.

📷. Photography.

📖. Reading books.

🖋. Drawing.

💪. Exercise.

🛒. Shopping

🧩. Puzzles.

🗣. Languages.

## Contact

	Linkedin	<a href="https://www.linkedin.com/in/maram-alossaimi">www.linkedin.com/in/maram-alossaimi</a>
	ResearchGate	<a href="https://www.researchgate.net/MaramAlossaimi">www.researchgate.net/MaramAlossaimi</a>
	Email	<a href="mailto:malossaimi1@sheffield.ac.uk">malossaimi1@sheffield.ac.uk</a>
	Website	<a href="https://maramalossaimi.netlify.app">https://maramalossaimi.netlify.app</a>
	Github	<a href="https://github.com/MaramAlossaimi">https://github.com/MaramAlossaimi</a>