Abdulhafeez A. Abdulsalam

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Citizenship: Nigerian

Education Diploma in Mathematics 2024-2025 The Abdus Salam International

Centre for Theoretical Physics

(ICTP)

Bachelor of Science (Mathematics) First Class Honours University of Ibadan

CGPA: 3.68/4.00 April, 2024 Ibadan, Nigeria

West African Examinations Council 2018 Great Everlee College

(High School Diploma) Ikorodu, Lagos, Nigeria

Theses

ICTP Diploma Thesis (2025): Discrete Maximal The Abdus Salam ICTP

Functions

Dr. Emanuel Carneiro Diploma Supervisor:

Undergraduate Thesis (2024): University of Ibadan **Symmetric Functions**

Ibadan, Nigeria

Undergraduate Supervisor: Dr. Praise Adeyemo

Fellowships and Honors

2022 Spirit of Ramanujan STEM Initiative Fellow

Experience and Leadership

Student Representative for the Mathematics Section and Speaker for Diploma Students at the Abdus Salam International Centre for Theoretical Physics (ICTP)

Academic Awards

2024 Dean's Roll of Honour recipient for the 2021/2022 academic session

Journal Articles

- 1. "New identities for the Laplace transform and their applications," with Ammar K. Mohammed, Integral Transforms and Special Functions, 1-25, DOI:10.1080/10652469.2024.2429142, 2024.
- 2. "New closed forms for a dilogarithmic integral, related integrals, and series," Scientia, Series A: Mathematical Sciences, 35, revistas.usm.cl, 2025.
- 3. "A new approach to evaluating Malmsten's integral and related integrals," arXiv:2204.01021 (accepted November 20th, 2023, Proceedings of the 16th International Symposium on Orthogonal Polynomials, Special Functions and Applications), 2022.

Seminar Talks

1. "Fourier sine and cosine transforms of expressions with nested square roots," Abdulhafeez A. Abdulsalam, May 08, 2025, Seminar Series: Topics in Special Functions and Number Theory, PDF, YouTube.

Conference Presentations

- 1. "New closed forms for a dilogarithmic integral, related integrals, and series," Abdulhafeez A. Abdulsalam, May 08, 2024, Parallel Session 3, 41st Annual Conference of the Nigerian Mathematical Society hosted by the Department of Mathematics, University of Ibadan, Ibadan, Nigeria.
- 2. "Connections between harmonic numbers and the zeta functions," Abdulhafeez A. Abdulsalam, January 08-12, 2024, Contributed Talks, Mini-course on moduli spaces and group actions at Workshop "Equivariant methods in geometry," Department of Mathematics, University of Ibadan, Ibadan, Nigeria.
- 3. "A new approach to evaluating Malmsten's integral and generalizations with Stirling polynomials," Abdulhafeez A. Abdulsalam, July 03-07, 2023, Short Talks at Workshop "Algebra, Topology and Applications," Department of Mathematics, University of Ibadan, Nigeria.
- 4. "A new approach to evaluating Malmsten's integral and related integrals," Abdulhafeez A. Abdulsalam, June 13-17, 2022, General Session, 16th International Symposium on Orthogonal Polynomials, Special Functions and Applications: Dedicated to the memory of Richard Askey, Centre de Recherches Mathématiques, Université de Montréal, Montréal, Quebec, Canada.

Summer Schools

1. **Mathematics in Ljubljana**, Faculty of Mathematics and Physics, University of Ljubljana, Slovenia, (*June 30–July 04, 2025*), *Certificate*.

Volunteer Work

- 1. Volunteer for the ICTP 60th Anniversary, November 15, 2024.
- 2. Supported the "UI ODE-Integration Bee 2.0" in November 2024, inspired by the annual MIT Integration Bee tradition, and contributed to providing cash prizes for the winners.
- 3. "An introductory approach to LATEX typesetting," Abdulhafeez A. Abdulsalam, June 03-06, 2024, Laboratory for Interdisciplinary Statistical Analysis, University of Ibadan, Ibadan, Nigeria, PDF.
- 4. Facilitated and organised the "UI ODE-Integration Bee" in February 2024, inspired by the annual MIT Integration Bee tradition, and secured sponsorships to award cash prizes to winners.
- 5. "Introduction to Special Functions (Gamma Function)," Abdulhafeez A. Abdulsalam, October 2, 2023, an introductory lecture to students enthusiastic about special functions, PDF, YouTube.
- 6. "An introductory approach to LaTeX typesetting," Abdulhafeez A. Abdulsalam, July 21, 2023, in collaboration with AI Saturdays, Ibadan, University of Ibadan, Ibadan, Nigeria, PDF, YouTube.