



Rashad M. Ashar | الرقم: ص د-11364-31-443 التاريخ: 18/02/1443
Full Professor (Mathematical Analysis)



17- Dec - 1974
in Taiz, Yemen



Yemeni



rmahezam@nu.edu.sa
rashad1974@hotmail.com



Married and have 4
children



Department of Mathematics, Najran
University, Saudi Arabia



00966534501778



ORCID: <https://orcid.org/0000-0002-6616-2008>



Scopus ID: 25637203500



ResearcherID: S-2886-2017



Scientific Degrees:

Jun 2008

Ph. D. in Mathematics, 2008, Department of Mathematics, Faculty of Science, Cairo University. The thesis is refereed by Professors Frank Stenger, USA, University of Utah Salt Lake City and Gerhard Schmeisser, Germany, University of Erlangen-Nuremberg.

Apr 2004

M. Sc. in Mathematics, 2004, Department of Mathematics, Faculty of Science, Cairo University. The Master thesis is refereed by Professors Antonio G. Garcia, Spain, University Carlos III de Madrid, and Hassan M. El-Owaidey, Egypt, Al-Azhar University.

Jul 1995

B.S. in Mathematics, Department of Mathematics, Faculty of Education, Sana'a University, Yemen and complete the courses of B.S., (1999), Department of Mathematics, Faculty of Science, Sana'a University, Yemen.

● My main supervisor of the M.Sc. thesis and the Ph. D. thesis was Prof. Dr. Mahmoud Annaby, Department of Mathematics, Faculty of Science, Cairo University, Egypt.



Positions Held:

Dec 2020 - Now

Full Professor, Department of Mathematics, College of Arts & Sciences, Najran University, Saudi Arabia.

Dec 2016 - Nov 2020

Associate Professor, Department of Mathematics, College of Arts & Sciences, Najran University, Saudi Arabia.

Jan 2014 - Nov 2016

Assistant Professor, Department of Mathematics, College of Arts & Sciences, Najran University, Saudi Arabia.

Oct 2012 - Nov 2013

Postdoctoral from Alexander von Humboldt in the Institute of Mathematics, University of Lübeck, Germany.

Dec 2011 - Aug 2012

Assistant Professor, Department of Mathematics, College of Arts & Sciences, Najran University, Saudi Arabia.

Oct 2010 - Jun 2011

Lecturer in the University of Science and Technology, Sana'a, Yemen.

Mar 2009 - Oct 2011

Head of Department of Mathematics in Faculty of Education Al-Mahweet, Sana'a University, Yemen.

Aug 2008 - Oct 2011

Assistant Professor in the Department of Mathematics, Faculty of Education, Al-Mahweet, Sana'a University, Yemen.

Sep 2008 - Jun 2011

Sana's University sent me to study the M.Sc. and Ph. D. degrees in the Department of Mathematics, Faculty of Science, Cairo University, Egypt.

Oct 1997 - Dec 2000

Demonstrator in Department of Mathematics, Faculty of Education Al-Mahweet, Sana'a University, Yemen.

Dec 1995 - Sep 1997

Demonstrator in Higher Institute of Teachers, Taiz, Yemen

**Under review:**

- 1- R. M. Asharabi and M.M. Tharwat, Computing eigenvalues of Dirac systems with multi-eigenparameter-dependent transmission conditions by using generalized sinc-Gaussian method, *Compute. Appl. Math.*
- 2- R. M. Asharabi and F. H. Al-Haddad, Multivariate sinc-Gauss sampling for approximation of the analytic functions of several variables and their derivatives, *Numer. Algor.*

Accepted for Publication:

- 1- R. M. Asharabi, Periodic nonuniform sinc-Gauss sampling, *Filomat.*
- 2- R. M. Asharabi, Multivariate form of Hermite sampling series, *Appl. Math. J. Chinese University*

2021:

- 1- M.H. Annaby, R. M. Asharabi and M.M. Tharwat, An Overview of the Computation of the Eigenvalues Using Sinc-Methods, *New Sinc Methods of Numerical Analysis: Festschrift in Honor of Frank Stenger's 80th Birthday*, (2021), 255-298, Springer
- 2- M.H. Annaby, R. M. Asharabi, Sinc-Gaussian Approach for Solving the Inverse Heat Conduction Problem, *New Sinc Methods of Numerical Analysis: Festschrift in Honor of Frank Stenger's 80th Birthday*, (2021), 3-21, Springer
- 3- R. M. Asharabi and J. Prestin, Accurate sampling formula for approximating the partial derivatives of bivariate analytic functions, *Numer. Algorithm*, (2021), 86, 1421-1441.

2020:

- 1- R. M. Asharabi and J. Prestin, Computing eigenpairs of two-parameter Sturm-Liouville systems using the bivariate sinc-Gauss formula, *Comm. Pure Appl. Anal.*, (2020), 19, 4143-4158.
- 2- R. M. Asharabi and F.M. Al-Abbas, Error analysis for regularized multidimensional sampling expansions, *Electron. Trans. Numer. Anal.*, (2020), 52, 320-341.

2019:

- 1- R. M. Asharabi, Generalized bivariate Hermite-Gauss sampling, *Comput. Appl. Math.*, (2019), 38: 29 DOI:10.1007/s40314-019-0802-z
- 2- M.H. Annaby and R. M. Asharabi, Derivative sampling expansions for the linear canonical transform: convergence and error analysis, *J. Comput. Math.*, (2019) 37, 431-446.

2018:

- 1- CM.H. Annaby and R. M. Asharabi, Sinc-interpolants in the energy plane for regular solution, Jost function, and its zeros of quantum scattering, *J. Math. Phys.*, (2018), 59, 013502.
- 2- R. M. Asharabi and A. Al-Hayzea, Double sampling series derivatives and bounds for the truncation error, *Appl. Math. J. Chinese Univ.* (2018), 33, 209-224.
- 3- M.H. Annaby and R. M. Asharabi, A sinc-Gaussian solver for general second order discontinuous problems, *Japan J. Indust. Appl. Math.*, 668-35:653 (2018).
- 4- R. M. Asharabi and M.M. Tharwat, The use of the generalized sinc-Gaussian sampling for numerically computing eigenvalues of periodic Dirac system, *Electron. Trans. Numer. Anal.*, (2018), 48, 373-386.

2017:

- 1- R. M. Asharabi and M.M. Tharwat, Approximating eigenvalues of Dirac system with discontinuities at several points using Hermite-Gauss method, Numer. Algorithms., (2017), 76, 655-673
- 2- R. M. Asharabi and H. Al-Haddad, A bivariate sampling series involving mixed partial derivatives, Turk. J. Math., (2017), 41, 387 – 403.
- 3- R. M. Asharabi and H. S. Al-Abbas, Truncation error estimates for generalized Hermite sampling, Numer. Algor., (2017), 74, 481-497.
- 4- M.H. Annaby and R. M. Asharabi, Multiband sampling theorems for Mittag-Leffler transforms bandlimited on rays, Integral Transforms Spec. Funct., (2017), 28, 732-750.
- 5- R. M. Asharabi, Approximating eigenvalues of boundary value problems by using the Hermite-Gauss sampling method, Electron. Trans. Numer. Anal., (2017), 46, 359-374

2016:

- 1- R. M. Asharabi, generalized sinc-Gaussian sampling involving derivatives, Numer. Algorithms, (2016), 73, 1055-1072
- 2- M.H. Annaby and R. M. Asharabi, Bounds for truncation and perturbation errors of a nonuniform sampling series, BIT Numer. Math. (2016), 56, 807-832.
- 3- R. M. Asharabi and J. Prestin, On two-dimensional classical and Hermite sampling, IMA J. Numer. Anal. (2016). 36, 851-871.
- 4- R. M. Asharabi, A Hermite-Gauss method for the approximation of eigenvalues of regular Sturm-Liouville problems, J. Inequal. Appl. 2016, (2016), 154. doi: 10.1186/s13660-016-1098-9

2015:

- 1- R. M. Asharabi and J. Prestin, A modification of Hermite sampling with a Gaussian multiplier, Numer. Funct. Anal. Optim. 36, (2015), 419-437.
- 2- M.H. Annaby and R. M. Asharabi, Error estimates associated with sampling series of the linear canonical transforms, IMA J. Numer. Anal. 35, (2015), 931-946.

2014:

- 1- R. M. Asharabi, Aliasing error for sampling series derivatives, Sampl. Theory Signal Image Process. 13 (2014), 1-20.

2012:

- 2- M.H. Annaby and R. M. Asharabi, Computing eigenvalues of Sturm-Liouville problems by Hermite interpolations, Numer. Algorithms, 60 (2012), no. 3, 355-367.

2011:

- 1- M.H. Annaby and R. M. Asharabi, Exact evaluations of trigonometric sums by sampling theorems, Acta Mathematica Scientia, 31B, (2011), No.2, 408-418.
- 2- M.H. Annaby and R. M. Asharabi, Truncation, amplitude, and jitter errors on for sampling series derivatives. J.Aprox. Theory, 163, (2011), 336-362.

2010:

- 1- M.H. Annaby and R. M. Asharabi, Error analysis associated with uniform Hermite interpolations of band limited functions. J. Korean Math. Soc. 47 (2010), No.6, 1299-1316.

2011:

- 1- M.H. Annaby and R. M. Asharabi, Exact evaluations of trigonometric sums by sampling theorems, Acta Mathematica Scientia, 31B, (2011), No.2, 408-418.

- 1- M.H. Annaby and R. M. Asharabi, Approximating eigenvalues of discontinuous problems by sampling theorems, J. Numer. Math. 16 (2008), no. 3, 163–183. (With M.H. Annaby).
- 2- M.H. Annaby and R. M. Asharabi, Computing eigenvalues of boundary-value problems using sinc-Gaussian method, Sampl. Theory Signal Image Process. 7 (2008), no. 3, 293–311. (With M.H. Annaby).
- 3- M.H. Annaby and R. M. Asharabi, On sinc-based method in computing eigenvalues of boundary-value problems, SIAM J. Numer. Anal. 46 (2008), no. 2, 671–690. (With M.H. Annaby).
- 4- M. H. Abu-Risha, M.H. Annaby and R. M. Asharabi, Spectral and sampling theorems in, Sampl. Theory Signal Image Process. 2 (2008), 145–164.



Research interests

- Sampling Theory
- Sinc Methods
- Error analysis associated with sampling series
- Computing eigenvalues of boundary value problems
- Trigonometric sums
- Accelerating the convergence of sampling series



Journals I worked for as a referee



Mathematical
Reviews, AMS



zbMATH



Applied Mathematics and
Computation, Elsevier



Boundary Value
Problems, Springer

STSIP

Sampling Theory in Signal
and Image Processing



Annals of functional
analysis, Springer



Filomat



Mathematical
Problems in
Engineering, Hindawi



Journal of
Approximation
Theory, Elsevier



Banach Journal of
Mathematical Analysis,
Springer



Electronic Transaction
Numerical Analysis



Fellowships and Visits

Jun 1, 2019 –
Aug 31, 2019

Renewed Research Stay in Germany from Alexander von Humboldt foundation in Germany, University of Lübeck.

Jul 1, 2017 –
Sep 31, 2017

Renewed Research Stay in Germany from Alexander von Humboldt Foundation in Germany, University of Lübeck, with Prof. Mahmoud Annaby.

Jan 1, 2014 –
Dec 31, 2014

Return fellowship from Alexander von Humboldt in Germany.

Oct 1, 2012 –
Nov 30, 2013

Postdoctoral fellowship from Alexander von Humboldt in Germany (Georg Forster Research Fellowships for Postdoctoral Researcher). The host professor was Prof. Jürgen Prestin, Institute of Mathematics, Lübeck University, Germany.

Jul 1, 2011 –
Sep 31, 2011

Research fellowship from Alexander v | 18/02/1443 التاريخ: 443-31-11364 ص د-الرقم
Cultural Dialog) in Germany, Institute of Mathematics, University of Lübeck.



Conferences

1st – 6th Sep 2021

Scientific Research week in the Era of Digital Transformation, Arabic Researcher ID (ARID), Malaysia, Online Event.

4th – 5th Jul 2021

International Congress of Advanced Technology and Engineering (ICOTEN), an online conference.

24th – 30th Jul 2020

Advanced Scientific Research Week, Arabic Researcher ID (ARID) Malaysia, an Online Event.

19th – 23rd Aug 2019

Workshop: Modeling, interpolation, and approximation for waves and signals in Lübeck, Germany

25th – 28th Jun 2019

Annual Meeting of the Alexander von Humboldt Foundation in Berlin, Germany.

10th – 13th Apr 2019

International Exhibition and Conference on Higher Education in Riyadh, Saudi Arabia.

4th – 6th Dec 2018

International Conference on Education Evaluation (ICEE 2018) in Riyadh, Saudi Arabia.

4th – 5th Apr 2018

Conference of Graduate Studies in Saudi Universities- Reality and development prospects in King Khaled University, Abha, Saudi Arabia

31st Jul – 4th Aug 2017

Summer School "Modeling, Analysis, and Approximation Theory toward applications in tomography and inverse problems" in the University of Lübeck, Germany.

11th – 13th Oct 2015

The 2nd Saudi International Conference on Scientific Publishing, 11-13 October 2015, King Saud University, Riyadh, Saudi Arabia.

1st – 5th Jul 2013

10th International Conference on Sampling Theory and Applications (SampTA) in Bremen, Germany.

28th – 30th Nov 2012

Network Meeting of the Alexander von Humboldt Foundation in Karlsruhe, Germany.

27th – 29th Jun 2011

Annual Meeting of the Alexander von Humboldt Foundation in Berlin, Germany

3rd – 6th Jan 2006

The International Conference on Mathematical Analysis and its Applications, ICMAA06 in Asyut, Egypt.

2005, 2006, 2007

Annual one day analysis conference, Cairo University, Egypt.



Other Certificates and Experience



TOEFL certificate of the Language Center – Cairo University in 2003.



ICDL certificate from UNESCO in 2003.

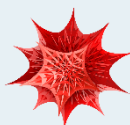


Certificate in SPSS from the Institute of Statistics – Cairo University in 2008.



Blackboard

Using Blackboard efficiently
2015 – Now.



Using Mathematica program
efficiently (2003 – Now).



Using Latex program efficiently
(2001 – Now).



Supervision Experience

2019 – 2021

- M.Sc. student Mrs. Felwah Al-haddad, A Modification of Multidimensional Sampling with a Gaussian Multiplier, Najran University.

2018 – 2020

- M.Sc. student Mrs. Fatemah Al-Abbas, On Regularized Sampling Expansions, Najran University.

2015 – 2016

- M.Sc. student Mrs. Hanan Al-Abbas, Error Analysis on Complex Domain for Generalized Hermite Sampling Expansion, Najran University.

2015 – 2016

- M.Sc. student Mrs. Aisha Al-Hayzea, On Two-Dimensional Sampling Series, Najran University.



Universities Committees

- Member of the council of SERC (Scientific and Engineering Research Center), Najran University, April 2019- April 2021
- Coordinator of the postgraduate studies in College of Arts & Sciences, Najran University, November 2015- Present.
- Member of the Postgraduate Programs Unit in Najran University, Najran University, November 2015- Present.
- Member of the Academic Advising, College Arts & Sciences, Najran University January 2014- Present.
- Member of the Quality Unit, Department of Mathematics, Najran University, January 2014- Present.



Courses

I taught the following courses several times in different universities

Undergraduate courses

- Real Analysis (1), (2)
- Functional Analysis
- Complex Analysis
- Mathematical Analysis
- Numerical Analysis (1), (2)
- Calculus (1), (2), (3)
- Ordinary Differential Equations (1), (2)
- Partial Differential Equations
- Probability Theory

Postgraduate courses

- Advanced Functional Analysis
- Advanced Complex Analysis
- Selected Topics in Analysis
- Analysis



Reference:

Professor Mahmoud H. Annaby

- Department of Mathematics, Faculty of Science, Cairo University, Giza, Egypt.

✉ mhannaby@yahoo.com  [Google Scholar page](#)

Professor Jürgen Prestin

- Institute of Mathematics, Lübeck University, Lübeck, Germany.

✉ prestin@math.uni-luebeck.de  [Google Scholar Page](#)