

Ministry of Education
Kingdom of Saudi Arabia
Northern Border University
College of Science
Department of Mathematics

جامعة الحدود الشمالية
NORTHERN BORDER UNIVERSITY
كلية العلوم



وزارة التعليم
المملكة العربية السعودية
جامعة الحدود الشمالية
كلية العلوم
قسم الرياضيات



DEPARTMENT OF MATHEMATICS
Bachelor in Mathematics Program

Mathematics Department Scientific Publications

Mathematics Department Scientific Publications 2023 - 2024

#	Title	Author(s)	Journal/Conference	DOI
1	Hardy Type Theorems for Linear Canonical Dunkl Transform	Ahmed Saoudi	Complex Analysis and Operator Theory	https://doi.org/10.1007/s11785-023-01478-x
2	A variation of L_p local uncertainty principles for Weinstein transform	Ahmed Saoudi and Imen Kallel	Proceedings of the Romanian Academy. Series A	https://acad.ro/sectii2002/proceedings/doc2024-IP/ip2024_m2_1790-Saoudi_Kallel.pdf
3	Linear canonical Fourier–Bessel wavelet transform: properties and inequalities	Hassan Ben Mohamed and Ahmed Saoudi	Integral Transforms and Special Functions	https://doi.org/10.1080/10652469.2024.2317724
4	Calderón type reproducing formula for the Weinstein–Stockwell transform	Hassan Ben Mohamed and Ahmed Saoudi	Rendiconti del Circolo Matematico di Palermo Series 2	https://doi.org/10.1007/s12215-023-00906-3
5	Motion or a Conservative System Near Equilibrium	Ehssan Ahmed, Alaa abalgaduir	International Journal of Research Publication and Reviews	https://ijrpr.com/uploads/V5ISSUE3/IJRPR23740.pdf
6	Introduction To The Convergence and Limit Sequence	Ehssan Ahmed ,Alaa Abdalgader,Fatima Alnoor,Hagir Wahbi,Asma mohamed	Journal of Xidian University	https://xadzkidx.cn/index.php/volume-18-issue-2-february-24/
7	Functions of Bounded Variation in Sobolev Space	Ehssan Ahmed ,Alaa Abdalgader,Fatima Alnoor,Nuha Alalam,Safwa yagoub	Journal of Xidian University	https://xadzkidx.cn/index.php/volume-18-issue-2-february-24/

8	On a $m(x)$ -polyharmonic Kirchhoff problem without any growth near 0 and Ambrosetti-Rabinowitz conditions	A Harrabi, K Hamdani A Fiscella	Mathematical Methods in the Applied Sciences	DOI: 10.1002/MMA.10027
9	Mathematical study of attractors to a 3D heated fluid	Hanen Louati1, Amel Toiti1, Ridha Selmi1, Abdullah Aljohani1 and Manar Mithgal Alruwaili1.	Archiv der Mathematik Volume 121,pages 317-328, 2023	https://link.springer.com/article/10.1007/s00013-023-01888-5
10	Existence and multiplicity solutions of Kirchhoff problems without Ambrosetti-Rabinowitz condition	A. Harrabi ,M Hamdani and A. Fiscella	Complex variable and elliptic equations	https://doi.org/10.1080/17476933.2023.2250984
11	On the $m(x)$ polyharmonic Kirchhoff problem without any growth near zero and Ambrosetti-Rabinowitz conditions	A. Harrabi ,M Hamdani and A. Fiscella	Matheatical Methods in the Ap Sciences	ID MMA-23-30349. Accepted for publication
12	Time-scale localization operators in the Weinstein setting	Ahmed Saoudi	Results in Mathematics	https://doi.org/10.1007/s00025-022-01792-4
13	A simulation Model of COVID-19 Epidemic Based on Vaccination and Treat	Fahdah Alshammari,ALaa Abdulqadir , Ehssan Ahmed,fatimaAlnoor	European Journal of Pure and Applied Mathematics	
14	A discussion on the Lie symmetry analysis, travelling wave solutions and conservation laws of new generalized stochastic potential-KdV equation	Naseem Abbas , Akhtar Hussain , Muhammad Bilal Riaz , Tarek F. Ibrahim , F.M. Osman Birkea and R. Abdelrahman Tahir :	Results in Physics 56(2024)	https://doi.org/10.1016/j.rinp.2023.107302

15	Optimal system, invariant solutions and dynamics of the solitons for the	Naseem Abbas a, Firdous Bibi a, Akhtar Hussain b, Tarek F. Ibrahim c, Arafa A. Dawood d,	Alexandria Engineering Journal	
16	Wazwaz Benjamin Bona Mahony equation	Fathea M. Osman Birkea e, Ahmed M. Hassan f	Mathematics	https://doi.org/10.1016/j.aej.2024.02.021
17	Conservation laws, exact solutions and stability analysis for time -fractional extendednquantum Zakharov -Kuznetsov equation.	Naseem Abbas1, Akhtar Hussain2,*, Tarek F. Ibrahim3, Manal Yagoub Juma4, Fathea M.Osman Birkea 5	Optical and Quantum Electronics	Optical and Quantum Electronics , 2024(Q2-2023impact factor
18	Optical solitons for the Kudryashov-Sinelshchikov equation by two analytic approaches	Akhtar Hussain, T.F. Ibrahim, Fathea M.O. Birkea, B.R. Al-Sinan, A.M.Alotaibi	optical and Quantum Eletronics .	Optical and Quantum Electronics , 2024(Q2-2023impact factor

Mathematics Department Scientific Publications 2022

#	Title	Author(s)	Journal/Conference	DOI
1	Differential Equations Models and Their Applications in Metallurgy	Ridha Selmi, Muflih Alhazmi, Abir Sboui, Hanen Louati, Amel Touati, Hechmi Hattab	Int. J. Anal. Appl. (2022), 20:7	Int. J. Anal. Appl., 20 (2021), 7. DOI:https://doi.org/10.28924/2291-8639-20-2022-7
2	Fractional Jacobi-Dunkl transform: properties and application	Iness Haouala and Ahmed Saoudi	Fractional Calculus and Applied Analysis	https://doi.org/10.1007/s13540-022-00102-7
3	Two-wavelet theory in Weinstein setting	Ahmed Saoudi	International Journal of Wavelets, Multiresolution and Information Processing	https://doi.org/10.1142/S0219691322500205
4	Uncertainty principle for the Fourier-like multipliers operators in q-Rubin setting	Ahmed Saoudi	Int. J. Anal. Appl. (2022), 20:7	https://www.emis.de/journals/BMAA/repository/docs/BMAA14-1-1.pdf