

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A GOVT AIDED UGC AUTONOMOUS & NAAC ACCREDITED INSTITUTE AFFILIATED TO RGPV BHOPAL)

DEPARTMENT OF ENGINEERING MATHEMATICS & COMPUTING

e-Newsletter

April - June - 2023

visit us at: <http://mitsgwalior.in/department/engineeringmathematics&computing>



Cartan Elie
(1869-1951)

Cartan Elie was influential mathematician who did fundamental work in theory of Lie Group, differential system and differential Geometry. His major contribution was on hyper-complex number system. Most of his development depends on characteristic equation of linear associative algebra.

Vision

The Department of Engineering Mathematics & Computing was setup in 2020 to import knowledge of mathematics and computer science that serve the groom the academic potential of student and abreast with recent technological developments.

Mission

- ❖ To develop an ability towards critical questioning.
- ❖ To enhance logical attitude and aptitude ability.
- ❖ To nurture the computational aptitude on a global platform.



B. Tech. programme in Engineering Mathematics and Computing offers the opportunity to combine an appreciation mathematical thinking with knowledge of computing. Mathematics is a fundamental intellectual tool in computing, but computing is increasingly used as a key component in mathematical problem solving. The course concentrates on areas where mathematics and computing are most relevant to each other, emphasizing the bridges between theory and practice. It offers opportunities for budding scientist in the field of Mathematics & Computing.

PUBLICATIONS

PAPER PUBLICATIONS

- Anup Singh Negi, B. Kumar, *, Ashok Kumar, Prachi, Abhinav Singhal, **A. K. Ray** and A. J. Chamkha, The Transportation of Maxwell Fluid in the Rotating and Stretching System: Rotor-Stator Spinning Disc Reactor Applications, **Journal of Nanofluids**, Vol. 12, pp. 623–632, 2023.
- Aarti Pathak, Rajshree Mishra, **D K Jain**, Farooq Ahmad and Altaf Ahmad Bhat: Certain results of Aleph-Function based on natural transform of fractional order; Journal of Annals of Mathematics and Physics, Vol 6(1),p.52-57, May 2023 ISSN: 2689-7636; DOI: <https://dx.doi.org/10.17352/amp.000078>
- Aarti Pathak, Rajshree Mishra, **D.K. Jain**, Farooq Ahmad: CERTAIN RESULTS OF MITTAG-LEFFLER FUNCTION BASED ON HARTLEY TRANSFORM IN TERMS OF FOX'S H-FUNCTION, PARIPEX - INDIAN JOURNAL OF RESEARCH, Volume - 12, Issue - 05 May - 2023, p.60-62, PRINT ISSN No. 2250 - 1991, DOI : 10.36106/paripex/1804797

https://www.worldwidejournals.com/paripex/recent_issues_pdf/2023/May/certain-results-of-mittagleffler-function-based-on-hartley-transform-in-terms-of-foxs-hfunction_May_2023_9694111830_1804797.pdf



- Jitendra Kumar and Vikas Shinde, Evaluation of Optimize Cost of Cloud Computing Systems using Queuing Model, Vol. 12 (6), June- 2023, p. 450-459: ISSN:2347-3150, Published by Mukta Shabd Journal.
- Ahmad Farooq, Bhat Altaf, **Jain D.K.**, Hussain Audil, Ahmad shabir: Numerical Techniques for Calculating Attainment of Course Outcome and Programme Outcome under NEP-2020; International Journal of Information Technology, Research and Applications (IJITRA); Vol. 2, No. 2, June 2023 p. 65-72; ISSN: 2583 5343, Published by: PRISMA Publication. <https://doi.org/10.59461/ijitra.v2i2.53><https://www.ijitra.com/index.php/ijitra/issue/archive>

PAPER PRESENTED IN CONFERENCE

- Akash Gaur*, Shaishav Jolly Saxena, **Atul Kumar Ray**, Diabetes Prediction using Unsupervised Machine Learning. **International Student Conference on “Multidisciplinary and Current Technical Research”**, MITS Gwalior, India, May 20 – 21st, 2023.
- Raaggee Singh*Sumit Singh Tomar, Rachit Bhargava, Devendra Singh Shekhawat, Deepak Yadav, **Atul Kumar Ray**, Ethical Implication, Role of Natural Language Processing, Reinforcement Learning, Risks and Future of Artificial General Intelligence. **International Student Conference on “Multidisciplinary and Current Technical Research”**, MITS Gwalior, India, May 20 – 21st, 2023
- Vikas Shinde, Rahul Jha and D.K. Mishra, Improved Sine Cosine Algorithm for searching global optima. **1st International conference on computational intelligence, communication Technology and networking (CICTN-2023)**, ABES Engineering college, Ghaziabad U.P. India 20-21 April 2023

WORKSHOP/FDP ATTENDED

- **Dr. Atul Kumar Ray, Dr. Divya Chaturvedi, Dr. Minakshi**, “3rd NATIONAL WORKSHOP ON “RECENT TRENDS IN MATHEMATICS” organized by the Department of Mathematics, St. Peter’s Institute of Higher Education & Research held on 13.04.2023.

- **Dr. Atul Kumar Ray, Dr. Divya Chaturvedi, Dr. Minakshi** “one-day National webinar on "Scientific Document Preparation using LaTeX " organized by Department of Computer Science and Engineering from 13th May, 2023.
- **Dr. Atul Kumar Ray, Dr. Minakshi**, Two-Day Online Workshop on “Data Analytics and Machine Learning through Zero Coding” organized by the Division of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai on 26 & 27 June 2023.
- **Dr. Jitendra Kumar**, Two Week International FDP on “ R- Programming for Data Science”, held on April, 24, 2023 to May 07, 2023, organized by Mizan- Tepi University, Ethiopia with collaboration with Poornima University, Jaipur, India, Baba Farid College, Bathinda & MathTech Thinking Foundation, India.
- **Dr. Jitendra Kumar**, Two Week FDP on “Data Analytics for Advanced Research using R and Tableau”, held on May 01 2023 to May 10, 2023, Sponsored by Ministry of Electronics and Information Technology, GoI organized by E & ICT Academy, NIT Warangal and GITAM School of Business Hyderabad, India.
- **Dr. Vikas Shinde**, One Week FDP on “ Data Science and Statistical Modeling: Harnessing Python and R- Programming:”, held on 28 June- 2023 to 04 July-2023, jointly organized by Central University of Punjab, Bathinda, Punjab and Dr. B. R. Ambedkar National Institute of Technology, Jalandhar and Mizan- Tepi University, Ethiopia with collaboration Baba Farid College, Bathinda & MathTech Thinking Foundation, India.
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- **Dr. Dilip Kumar Mishra, Dr. Santosh Kumar Bharadwaj and Rahul Jha** One Week FDP on “ Data Science and Statistical Modeling: Harnessing Python and R- Programming:”, held on 28 June- 2023 to 04 July-2023, jointly organized by Central University of Punjab, Bathinda, Punjab and Dr. B. R. Ambedkar National Institute of Technology, Jalandhar and Mizan- Tepi University, Ethiopia with collaboration Baba Farid College, Bathinda & MathTech Thinking Foundation, India.
- **Dr. Dilip Kumar Mishra**, One Week FDP on “ Recent Advances in Computer Science and Allied Domains” held on 26 June 2023-1 July 2023 organised by department of CSE and CSA, Sharda University ,Noida (U.P.) and Co-Sponsored by IEEE, ORACLE, Aeris and Computer Society of India.

WEBINAR/WORKSHOP/ACTIVITY ORGANIZED

- ❖ **Dr. Atul Kumar Ray** organized “**5-Day National Workshop on Applied Mathematics and Computing**” from 12th June – 16th June, 2023.

EXTRA ACHIEVEMENTS

- **Dr. Atul Kumar Ray**, Technical Program Chair in “International Student Conference on “Multidisciplinary and Current Technical Research” held on May 20 – 21st, 2023 at MITS Gwalior.
- **Dr. Atul Kumar Ray**, Reviewed Article in “Heliyon” (I.F. – 4) Elsevier, Online ISSN: 2405-8440.
- **Dr. Atul Kumar Ray**, Reviewed Article in “International Journal of Modern Physics C” (SCI, I.F. – 1.9) Elsevier, ISSN (online): 1793-6586.

Faculties Qualified SWAYAM NPTEL FDP Courses with Medals

- **Dr. Atul Kumar Ray, Dr. Divya Chaturvedi and Dr. Minakshi** are SWAYAM NPTEL DISCIPLINE STAR of session Jan-April, 2023.
- **Dr. Divya Chaturvedi, Dr. Minakshi, Dr. Atul Kumar Ray**, 12 Weeks FDP “Advanced Linear Algebra”, Elite, Jan-Apr 2023.
- **Dr. Atul Kumar Ray and Dr. Minakshi**, 12 Weeks FDP “Applied Mathematics in AI and ML”, Elite+Silver, Jan-Apr 2023.
- **Dr. Divya Chaturvedi**, 12 Weeks FDP “Applied Mathematics in AI and ML”, Elite+Silver, Jan-Apr 2023.

Induction Programs and Competitions conducted by the Department



DEPARTMENTAL/INSTITUTIONAL SOCIAL MEDIA



<https://www.youtube.com/c/MITSLive>

Link: <https://youtube.com/channel/UCB4Z-cETRTnADvi-nXwwCXg>



Link: https://www.instagram.com/invites/contact/?i=1wta8dhr95ncp&utm_content=p8ctdpe



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