# International Conference on Algebra and Applied Analysis (ICAAA -2018)

# August 9-11, 2018 **Organized by**

**Department of Mathematics** Integral University, Lucknow (U.P.), India



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Invited Speakers

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· Prof. G. Lee, South Korea

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- · Prof. A. Rababah, Jordan
- Prof. P. G .Romeo, India
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- · Prof. S. K. Mishra, India
- · Prof. M. Sedaghatjoo, Iran
- · Prof. F. A. Ebrahim, Egypt
- · Prof. 5. Khan, India
- · Prof. M. Kamarujjama, India
- · Prof. V. Sahai, India
- Prof. P. Mathur, India
- Prof. M. J. S. Shahwan, Bahrain



ne ler Registration & Submission ct-Jely 15, 2018. Submission of Full paper eadline for the ogust 02, 2018,

### **Topic Covered**

**Functional Analysis Differential Equations Special Functions Differential Geometry Differential Manifolds Group Theory Bing Theory** Topology **Numerical Analysis Fluid Dynamics** Optimization Linear Algebra **Module Theory** Cryptography **Complex Analysis Number Theory Lattice Theory Theory of Approximations Mathematical Modelling** 

Another the Chiversity is a NAAC accredited university established in 2004 and upproved by UGC under section 2(f) and 12(B) of UGC net 1956. The Foundation stone of this University was laid in the year 1993 by our country's great educator, leader, philosopher of Islam, Hazrat Maulana Syed Abul Husan Ali Husani Nudvi (R.A.). It has established its own credentials and singular reputation within a very short span of time. It has marvelous ambience and a picturesque campus with a lively environment that is highly conducive to higher and dedicated academic pursuits. Integral University, a seat of educational excellence, is a premier university of Lucknow. The university is committed to generating, disseminating and preserving knowledge with academic programmers in Science. Engineering and Management with the aim to equip the students with the academic rigour and intellectual capacity to most the sources the linear shellows: meet the corporate lousiness challenges.

#### About the Department

Addition the repartment of Mathematics from its very interprior is almost to be a centre of excellence in Mathematics. The energetic and dedicated faculty members are actively engaged in teaching ond research. The department of Mathematics has devoted very nucle in introvative research and offering B.S. (Physics, Mathematics & Computer Science), B.S. (Physics, Mathematics & Statistics). M. Se, (Mathematics) and Ph.D. Program in various dimensions of Mathematics, Statistics and Operations Research. The department is of to enganize Varianal workshops, International symposium and expert ferrors in different topics of Statistics and Operations Research is almost to equip the students with theoretical and nonlytical incoviding in different varies, Statistics and Operations Research is almost to equip the students with theoretical and nonlytical incoviding in different varies, of this will enable the endents to perform in a better: way in public and private organizations. The vision of the department is not only to transform young people to be competent and motivated professionals but also to contribute to the overall development of the nation.

#### About the conference:

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Advantate conferences International Conferences on Algebra and Applied Analysis (ICAAA-2018) will be held during August 9-11, 3018 at Integral University, Lucknow, India. This Conference is in the honour of Peol. M.A. Pathan (Ex President Indian Mathematical Society). The aim of the conference is to bring together the heading mathematicitans, industry experts and researchers to provide an international forum for academic exchange of ideas, research lindings, practical development in the field of Algebra and Analysis. The conference will promote the future collaborations among leading academicians, researchers and young scholars. The conference will prevent new results and future challenges in series of keynote talks, invited talks and research paper presentations. The conference will feature world class keynote speakers in main areas of Analysis and Algebra. The invited talks will be defined the advance. delivered by renowned experts across the glove

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AA-20	Dr. Zubair Khan Convener	Dr. Mobin Ahmad Co-Convener	Dr. Wascem Ahmad Khan Organizing Secretary	Dr. Malik Rashid Jamal Organizing Secretary

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"The logical beauty of numbers ensures solutions" reiterated the World Mathematicians gathered at ICAAA-2018.



Integral University Lucknow witnessed the amalgamation of the global think tanks in the field of Mathematics in the highly fruitful, 3 days International Conference on Algebra and Applied Analysis (ICAAA-2018) at the University.

The various departments at Integral University are known to open up avenues from all around the world with the new researches and discoveries in various fields. August 9th -11th, the University experienced an influx of renowned mathematicians, researchers from India, USA, Canada, South Korea, Iran and South Africa to congregate at the University campus to explore their fascination for numbers. Prof Syed Waseem Akhtar, Hon'ble Chancellor, Integral University and the chief patron of the conference welcomed the distinguished guests and sent a message globally to exchange ideas and researches that plays the catalyst in development. He said that even in ancient time, Mathematics was very much developed in India and defined algebra as the value of unknown values and mentioned Al Khawarijmi, the Father of Algebra, who was, one of the first to write about algebra.



Mathematics wouldn't be the subject it is today if it hadn't had been for the impact of applied mathematics and algebra. Experts say that the beauty of mathematics is found in these two subjects, such as in relativity or in number theory behind the RSA encryption widely used in internet security, or just in the way a wide range of techniques from all reaches of mathematics might be applied to solve a difficult problem. Also with hi-tech computers, mathematicians can even model highly complex systems such as the human heart, they do have answers as to why animals have spots on their bodies but have striped tails, can calculate non-deterministic systems like the stock market and can explain the movement of microscopic particles in a fluid.

Professor A.M Mathai, considered the world best in the contributions to Applied Statistics, Applications to special functions, Reaction Rate Theory in Astrophysics graced the conference to talk about Math being the simplest and creative study possible. He reiterated that every possible question or a daily problem would have a mathematical equation to solve it, provided one takes their curiosity seriously and systematically. With 25 books and more than 300 research publications to his credit, Arakaparambil Mathai Mathai, aged 83, addressed the participants of the conference with the view to inspire and stimulate the young minds. "Early to bed and early to rise, is the eternal formula applied by World Scientists to excel in Math", he asserted.





Prof M. A. Pathan, visiting Scientist, Center for Mathematical &Statistical Sciences (DST), Kerala, chief guest of the conference discussed the role of number theory in every span of life and also correlated differential geometry with Lie Algebra. He pointed out that the assembly of 4 generations of mathematics under one roof at this triumphant conference has produced and generate study and concepts for students to learn from. "Travelling to different places is mandatory for a good research in Mathematics" stated Prof Pathan.



"The high technical demands of these models and the ubiquity of computers in everyday life are making mathematicians ever more employable after the university level. It's imperative to study and explore math that has answers to some of the most pressing issues facing humanity today. It's an opportunity for the students pursuing the study of mathematics at Integral to gain a platform and be amongst the masters of the subject globally" express Dr. Zubair, Head, Department of Mathematics, Integral University.



(Prof. Syed Tariq Rizvi from Ohio State University, U.S.A)

"Mathematics is all about order and logic, it's omnipresent and no one can shy away with it" said Prof. Syed Tariq Rizvi from Ohio State University, U.S.A, who mentioned that his love for Algebra, discipline and research initiatives brings him to Integral University each time. He referred the conference and the University as the inspiring place for research & excellence that scholars can benefit from.



(Prof. Gangyong Lee from Chungnam National University, South Korea)

Prof. Gangyong Lee from Chungnam National University, South Korea, addressed the dignitaries and participants and expressed his excitement to be in India, and to be able to share his expertise with the Students at the University.

Dr.Syed Nadeem Akhtar, Director Planning & Research, Integral University, Lucknow, was ecstatic with the outcome of the collaborative and deep analysis of Mathematics and emphasized on the role of Research in every stream to get the best of a student and a University.

"Mathematics, otherwise a difficult choice for many, was presented in such a way by the master of the subjects that I am in awe of the subject, full of confidence to pursue M.Sc Mathematics," said a student participant at the University.

In this conference, two keynote addresses, two plenary talks and 23 invited talks were delivered by prominent speakers like Prof. A. M. Mathai, Macgill University, Canada, Prof. Syed Tariq Rizvi, The Ohio State University, Lima, USA, Prof. Pramod Kanwar, Ohio University, Zanesville, USA, Prof. Gangyong Lee, Chungnam National University, South Korea, Prof. Fatimah A. Z. Shirazi, University of Tehran, Iran, Prof. M.A. Pathan, Visiting Scientist, Centre for Mathematical and Statistical Sciences, Kerala, India, Prof. M. Ashraf, AMU, Aligarh, India, Prof. Q.H.Ansari. AMU, Aligarh, India , Prof. S.K. Mishra, BHU, Varanasi, India and Prof. M .M. Tripathi, BHU, Varanasi, India. Also, more than 70 research papers were presented by the participants. The Conference was attended by more than 150 participants.

ICAAA-2018 brought together the leading mathematicians, industry experts and researchers to provide an international forum for academic exchange of ideas, research findings, practical development in the field of Algebra and Analysis.