

International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021), 12-13 April 2021

Department of Mathematics,

Organized by

Department Of Mathematics

Sri Vidya Mandir Arts And Science College (A) Katteri, Uthangarai, Krishnagiri, Tamilnadu, India



Jyothi Engineering College , Thrissur, Kerala, India

In Collaboration With

Department of Mathematics, Christ (Deemed to be University) Hosur Road, S.G. Palya, Bengaluru, Karnataka, India

CHRIST

About the College

The Visionary Philanthropists of Sri Vidya Mandir Higher Educational Trust started Sri Vidya Mandir Arts & Science College in Uthangarai in the year 2000 with the noble aim of uplifting the economically and educationally backward districts of Dharmapuri and Krishnagiri into the number one educational destination in Tamil Nadu. The College is surrounded by the culturally rich pilgrimage centres, Hanumantheertham (2 km) and Theerthamalai (15 km), associated with the famous Epic, The Ramayana. The college is wellconnected with the nearby cities and is located in the Salem - Vellore State Highways. Currently the college has attained the strength of more than 4300 students, 135 faculty Members and 90 non-teaching staffs. Our College secured highest CGPA score in NAAC ('A' Grade, 3.27/4.00) among the Periyar University affiliated colleges in the first cycle and also recognized with the same till the year of 2025. Now our college has was accomplished with the status of Autonomous in the current academic year.

About the Department

The Department of Mathematics was established in the year 2004 with undergraduate B.Sc. degree in Mathematics with 26 students. The M.Sc. degree is being offered from the year 2007. From the year 2012 onwards, the department has emerged as a full-fledged research department offering M.Phil. Programmes and Ph.D. programs from 2016.Since 2004 the department has produced more than 6000 centrums. Now in 2020, the department holds nearly 1000 students with 25 faculties. It provides a teaching learning process to develop the talent through competency building. The department has 11 Ph.D. holders. Our department students have clinched 4 Gold Medal and 63 university ranking Periyar University Examinations.The Department has successfully organized 3 International conferences, 1 International level workshop, 5 National level Workshops with the financial assistance of diverse leading funding agencies and the contributions from the college management. The department runs to meet out the competent academic environment with adequate labs and library resources to support students in their pursuit of excellence in every sector of life.

About Christ University

CHRIST (Deemed to be University) was born out of the educational vision of St Kuriakose Elias Chavara, an educationalist and social reformer of the nineteenth century in South India. He founded the first Catholic indigenous congregation, Carmelites of Mary Immaculate (CMI), in 1831 which administers CHRIST (Deemed to be University).Established in 1969 as Christ College, it undertook path-breaking initiatives in Indian higher education with the introduction of innovative and modern curricula, insistence on academic discipline, imparting of Holistic Education and adoption of global higher education practices with the support of creative and dedicated staff. The University Grants Commission (UGC) of India conferred Autonomy to Christ College in 2004 and identified it as an Institution with Potential for Excellence in 2006. In 2008 under Section 3 of the UGC Act, 1956, the Ministry of Human Resource Development of the Government of India, declared the institution a Deemed to be University, in the name and style of Christ University. One of the first institutions in India to be accredited in 1998 by the NAAC, and subsequently in 2004 and 2016, CHRIST (Deemed to be University) has the top grade 'A' in the 4-point scale. The multi-disciplinary University which focuses on teaching research and service offers Bachelors to Doctoral programmes in humanities, social sciences, science, commerce, management, engineering, education, and law to over 25000 students. The campus is a living example for the harmonious multiculturalism with students from all the states of India and around 60 different countries. CHRIST (Deemed to be University) publishes six peer-reviewed research journals and has published more than 300 books in Kannada and English. A promoter of sports, music and literary activities, it is a nurturing ground for creative excellence.

About the Department

Since its inception in 1969, the department has been steadily growing with its mission to organize, create, connect and communicate mathematical ideas effectively through 4Ds: Dedication, Determination, Discipline and Direction. In our triple-major undergraduate programme the students acquire a holistic education with a solid foundation in Mathematics while in post-graduation they acquire the knowledge, skills and competency to excel in research, teaching, service sector and industry. The doctoral students are provided with training opportunities and facilities that are conducive for research. The well chalked-out doctoral programme is facilitated by professors with excellent track-record in research publication. The standard of supervision available in-house is on par with reputed institutes. Our curriculum caters to the diverse academic and career goals of the students. It covers core subjects and includes summer school programmes, internship activities, service- learning activities, individualized mentoring, research projects, and seminars, inter-collegiate and intra-collegiate programmes. The dedicated band of teachers with their vast experience, excellent research credentials and passion for Mathematics make this mathematics fraternity unique and special.

About Jyothi Engineering College

The Catholic Church has played a vital role in the field of Education, Health care and Social Service. Keeping in tune with the universal policy of the Church, the Archdiocese of Thrissur has illustrious track record of a century and a quarter in the education sector. Education was the prime concern of the Diocese ever since its inception. The legendary march in education started with St. Thomas High School in 1889. Since then, the education ministry had a phenomenal race forward and today it has a number of establishments under its umbrella including Jubilee Mission Medical College & Research Institute and St. Thomas College. Jyothi Engineering College under Thrissur Educational Trust founded by the Catholic Archdiocese of Thrissur, started functioning at Cheruthuruthy in the year 2002. With a visionary management, a team of dedicated faculty and a set of devoted staff and with the comparable infrastructural and instructional facilities in a quiet and studious rural environment, Jyothi has emerged as a Model among the self-financing colleges in Kerala. Within a decade it has achieved an envious position as the fourth best Engineering College in the State and stands third among the Engineering Colleges affiliated to APJ Abdul Kalam Technological University.

About the Conference

An Academic conference is a forum for academicians and researchers to meet and discuss the emerging trends in their respective fields and derive benefits for enhancing the research activities. In view of the increase in applications of mathematics in multidisciplinary field the conference will be focusing on the interdisciplinary aspects and applications. "INTERNATIONAL CONFERENCE ON NEW TRENDS IN DIFFERENTIAL EQUATIONS AND APPLIED MATHEMATICS (ICNTDEAM-2021)" is being organized to explore the new developments in the field of differential equations. The conference provides a common platform for researchers to acquaint them with advanced strategies with the help of experts in the subjects. It is intended that on participation in the conference the participants get a better knowledge to use mathematical techniques to analyze complex systems. Speakers from premier institutions in India and abroad with a vast knowledge in the field of differential equations and who have been quite active in the field for a long time will be delivering the invited talks. The main stake-holders are those interested in understanding and solving differential equations problems



Mobile : +919786124458 Email : ppalanitamil@gmail.com

Mobile : +919341254547 Email : pranesh.s@christuniversity.in.

Dr. S. Jaikumar, Convenor, SVMC

Dr. P. Palani, Convenor, SVMC Dr. S. Pranesh, Convenor, CHRIST

KEY NOTE SPEAKERS



Prof. O. D. Makinde Faculty of Military Science, Stellenbosch University, Private Bag X2, Saldanha 7395, South Africa.

TOPIC: Modelling Thermal Boundary Layer of Magneto-Nanofluid with Inherent Irreversibility.



Dr. Mahesha Narayana Department of Mathematics,

The University of the West Indies, Mona Campus, Kingston 7, Jamaica. **TOPIC: Exact solution of Boundary value problems** arising from Heat Transfer in Nano liquid flow due to quadratically stretching Sheet.



Universidad de Tarapacá

Coimbatore – 641 020.

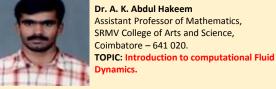
Dynamics.

Dr. S. Karthikeyan

Dr Kanchana C.

Av. Luis Emilio Recabarren 2477, Iguigue, Chile. **TOPIC: Break down of regular convective motion to** Chaotic one at a threshold Eigen value in Hydrodynamics.

Research Expert, Instituto de Alta Investigación



Dr. S. R. Sudheendra Professor and Head, Department of Mathematics, School of Engineering, Presidency University, Bengaluru-560 089. **TOPIC: Mathematical Modelling of atmospheric** Polutions.



Assistant Professor, Department of Mathematics, R.M.K. Engineering College, Kavarapettai-601206, Chennai. **TOPIC: Functional Equations and its Applications.**



Dr. Prakash. R Associate Professor, Department of Mathematics, **RV** College of Engineering Mysuru Road, Bangaluru-560059 **TOPIC:** Numerical solution of Boundary Value Problems using Shooting method.

Gelegram Link



Dr. P. G. Siddheshwar F.I.M.A.(U.K.), F.N.A.Sc., Senior Professor of Mathematics, CHRIST (Deemed to be University), Hosur Road, Bengaluru - 560 029, India. **TOPIC: Making sense out of differential** equations without solving them.

Dr. Eswari Prem

Assistant Professor, PG and Research Department of Mathematics. Govt. Arts College for Men, Krishnagiri - 635 001. **TOPIC: A Brief Introduction To Differential Equations And Its Applications In Mathematical** Modelling.



Dr. Sunny Joseph Kalayathankal Principal (Professor & Dean of Research), Jyothi Engineering College, Cheruthuruthy, Thrissur, Kerala. **TOPIC: Fuzzy Modeling & Decision Making** Applications in the Real World.



Dr. A. George Maria Selvam Associate Professor and Head, Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, Vellore Dt.-635601. **TOPIC: Fractional Derivatives and Applications.**



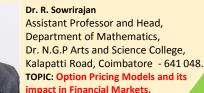
Assistant Professor. Department of Mathematics, Periyar University, Salem. **TOPIC: Controllability of Semilinear Stochastic Dynamical Systems.**

zoom Línk

CLICK HERE



Dr. A. Tanuia Assistant Professor. Department of Mathematics, Siddaganga Institute of Technology. Tumkur. **TOPIC: Complex differential Equations.**



: CLICK HERE



SRI VIDYA MANDIR ARTS AND SCIENCE **COLLEGE (AUTONOMOUS)** UTHANGARAI, KRISHNAGIRI, TAMIL NADU, INDIA In Collaboration With



CHRIST (Deemed To Be University), BENGALURU, KARNATAKA, INDIA JYOTHI ENGINEERING COLLEGE, THRISSUR, KERALA

International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021)

12-13 APRIL 2021

Organized by

DEPARTMENT OF MATHEMATICS

VouTube Link (12.04.2021): CLICK HERE VouTube Link (13.04.2021): CLICK HERE



Registration Link : CLICK HERE

About the College

The Visionary Philanthropists of Sri Vidya Mandir Higher Educational Trust started Sri Vidya Mandir Arts & Science College in Uthangarai in the year 2000 with the noble aim of uplifting the economically and educationally backward districts of Dharmapuri and Krishnagiri into the number one educational destination in Tamil Nadu. The College is surrounded by the culturally rich pilgrimage centres, Hanumantheertham (2 km) and Theerthamalai (15 km), associated with the famous Epic, The Ramayana. The college is suell-connected with the nearby cities and is located in the Salem - Vellore State Highways. Currently the college has attained the strength of more than 4300 students, 135 faculty Members and 90 non-teaching staffs. Our College secured highest CGPA score in NAAC ('A' Grade, 3.27/4.00) among the Periyar University affiliated colleges in the first cycle and also recognized with the same till the year of 2025. Now our college has was accomplished with the status of Autonomous in the current academic year.

About the Department

The Department of Mathematics was established in the year 2004 with undergraduate B.Sc. degree in Mathematics with 26 students. The M.Sc. degree is being offered from the year 2007. From the year 2012 onwards, the department has emerged as a full-fledged research department offering M.Phil. Programmes and Ph.D. programs from 2016.Since 2004 the department has produced more than 6000 centrums. Now in 2020, the department holds nearly 1000 students with 25 faculties. It provides a teaching learning process to develop the talent through competency building. The department has 11 Ph.D. holders. Our department students have clinched 4 Gold Medal and 63 university ranking Periyar University Examinations.

The Department has successfully organized 3 International conferences, 1 International level workshop, 5 National level Workshops with the financial assistance of diverse leading funding agencies and the contributions from the college management. The department runs to meet out the competent academic environment with adequate labs and library resources to support students in their pursuit of excellence in every sector of life.

About CHRIST University

CHRIST (Deemed to be University) was born out of the educational vision of St Kuriakose Elias Chavara, an educationalist and social reformer of the nineteenth century in South India. He founded the first Catholic indigenous congregation. Carmelites of Mary Immaculate (CMI), in 1831 which administers CHRIST (Deemed to be University).Established in 1969 as Christ College, it undertook path-breaking initiatives in Indian higher education with the introduction of innovative and modern curricula, insistence on academic discipline, imparting of Holistic Education and adoption of global higher education practices with the support of creative and dedicated staff. The University Grants Commission (UGC) of India conferred Autonomy to Christ College in 2004 and identified it as an Institution with Potential for Excellence in 2006. In 2008 under Section 3 of the UGC Act, 1956, the Ministry of Human Resource Development of the Government of India, declared the institution a Deemed to be University, in the name and style of Christ University. One of the first institutions in India to be accredited in 1998 by the NAAC, and subsequently in 2004 and 2016, CHRIST (Deemed to be University) has the top grade 'A' in the 4-point scale. The multi-disciplinary University which focuses on teaching research and service offers Bachelors to Doctoral programmes in humanities, social sciences, science, commerce, management, engineering, education, and law to over 25000 students. The campus is a living example for the harmonious multiculturalism with students from all the states of India and around 60 different countries. CHRIST (Deemed to be University) publishes six peer-reviewed research journals and has published

(ICNTDEAM - 2021) more than 300 books in Kannada and English. A promoter of sports, music and literary activities, it is a nurturing ground for creative excellence.

About Jyothi Engineering College

The Catholic Church has played a vital role in the field of Education, Health care and Social Service. Keeping in tune with the universal policy of the Church, the Archdiocese of Thrissur has illustrious track record of a century and a quarter in the education sector. Education was the prime concern of the Diocese ever since its inception. The legendary march in education started with St. Thomas High School in 1889. Since then, the education ministry had a phenomenal race forward and today it has a number of establishments under its umbrella including Jubilee Mission Medical College & Research Institute and St. Thomas College. Jyothi Engineering College under Thrissur Educational Trust founded by the Catholic Archdiocese of Thrissur, started functioning at Cheruthuruthy in the year 2002. With a visionary management, a team of dedicated faculty and a set of devoted staff and with the comparable infrastructural and instructional facilities in a quiet and studious rural environment, Jyothi has emerged as a Model among the self-financing colleges in Kerala. Within a decade it has achieved an envious position as the fourth best Engineering College in the State and stands third among the Engineering Colleges affiliated to APJ Abdul Kalam Technological University.

About the Conference

An Academic conference is a forum for academicians and researchers to meet and discuss the emerging trends in their respective fields and derive benefits for enhancing the research activities. In view of the increase in applications of mathematics in multidisciplinary field the conference will be focusing on the interdisciplinary aspects and applications. "INTERNATIONAL CONFERENCE ON NEW TRENDS IN DIFFERENTIAL EQUATIONS AND APPLIED MATHEMATICS (ICNTDEAM-2021)" is being organized to explore the new developments in the field of differential equations. The conference provides a common platform for researchers to acquaint them with advanced strategies with the help of experts in the subjects. It is intended that on participation in the conference the participants get a better knowledge to use mathematical techniques to analyze complex systems. Speakers from premier institutions in India and abroad with a vast knowledge in the field of differential equations and who have been quite active in the field for a long time will be delivering the invited talks. The main stake-holders are those interested in understanding and solving differential equations problems

Focussed Areas

> Differential Equations
 > Difference Equations
 > Functional Equations
 > Computational Science
 > Discrete Mathematics
 > Financial Mathematics

- > Numerical Analysis
 > Fluid Dynamics
 > Graph Theory
 > Statistics and Probab
 - Statistics and Probability
 Stochastic Process

> Neural Network

International Advisory Committee

Prof. O. D. Makinde, Stellenbosch University, South Africa Dr. Q. M. Al Madallal, UAE University, UAE Dr. G. Muhiuddin, University of Tabuk, Saudi Arabia Dr. Anas Al-Masarwah, Prince of Songkla University, Thailand Dr. Young Beejum, Gyenogsang National University, Korea Dr. Michael Th Rassias, University of Zurich, Switzerland Dr. Ovidin Thdumitru Bagdasar, United Kingdom Dr. Habib Harizavi, Shahid Chamran University of Ahvaz, Iran Dr. Aiyared Iampan, University of Phayao, Thailand Dr. M. Adhiyaman, RIFM, China

National Advisory Committee

Prof. C. Selvaraj, Periyar University, Salem Dr. A. Muthusamy, Periyar University, Salem Dr. Sanjeev Anand Sahu, ISM, Dhanbad Dr. A. K. Abdul Hakeem, SRKV, Coimbatore Dr. Eswari Prem, Govt Arts College, Krishnagiri Dr. P. Prakash, Perivar University, Salem Dr. S. Karthikeyan, Periyar University, Salem Dr. B. Venkateswarlu, GITAM University, Bengaluru Dr. B. Ganga, Providence College for Women, Coonoor Dr. S. Eswaramoorthi, Dr. N.G.P ASC, Coimbatore Dr. M. Angayarkanni, KKC, P.Velur Dr. S. R. Sudheendra, Presidency University, Bengaluru Dr. R. Sivaraj, VIT University, Vellore Dr. A. George Mariya Selvam, SHC Dr. T. Tamzh Chelvam, MSU Dr. M. Alagappan, Yadhva College Dr. K. Indhira, VIT, Vellore Dr. Naravan Chaudhuri, CC, Kolkata Mr. Dipek Rajan Biswal, KCK, Odisha Dr. S. Naresh kumar, SKAC, Kovai Dr. S. Muthuvel, KEC, Erode Dr. K. Alagesan, KKC, P.Velur Dr. K. Dhilip Kumar, SSMC, Komarapalayam Links Registration Link : CLICK HERE WhatsApp Link : CLICK HERE **Telegram Link** : CLICK HERE Website Link : CLICK HERE ZOOM Link : CLICK HERE

YouTube Link (12.04.2021) : CLICK HERE

YouTube Link (13.04.2021) : <u>CLICK HERE</u> REGISTRATION FREE



 Dr. S. Jaikumar, Convenor, SVMC
 +918144016643
 Email : sjaisan18@gmail.com

 Dr. P. Palani, Convenor, SVMC
 +919786124458
 Email : ppalanitamil@gmail.com

 Dr. S. Pranesh, Convenor, CHRIST, +919341254547
 Email : pranesh.s@christuniversity.in

(ICNTDEAM - 2021)

Chief Patron

Thiru. V. Chandrasekaran Founder, SVMC Group of Institutions

Patrons

Thiru. R. P. Rajee Secretary, SVMC Thiru. P. Venkatachalam Additional Secretary, SVMC

Conference Chairman's

Dr. T. Balasubramanian Principal, SVMC Dr. N. Gunasekaran Vice Principal, SVMC

Head Dept of Mathematics

Dr. C. Ragavan, SVMC Dr. Mayamma Joseph, CHRIST

Convenors

Dr. S. Pranesh , CHRIST Dr. S. Jaikumar, SVMC Dr. P. Palani, SVMC

Organising Secretaries

Dr. Joseph Varghese, CHRIST Dr. J. Satishkumar, SVMC Dr. S. Munirathinam, SVMC Ms I. Mohanadharshini, SVMC

Committee Members Professor Department of Mathematics, SVMC & CHRIST

Dr. Smita S Nagouda Dr. S. Senthilkumar **Dr. Pradeep G Siddheshwar** Mr. J. Venkatesan Dr. Sudev N K Mr. M. Balamurugan Dr. Joseph T V Mr. S. Ponnurangan **Dr. Paradesi Tabitha** Mrs. V. Komathi **Dr. Charles Dominic** Dr. M. Kaviyarasu Dr .Pundikala Veeresha Mr. V. Poovarasan Dr. Hari Bhaskar R Mr. T. Ramesh **Dr. Sangeetha Shathish** Mr. S. Siyasankar Dr. Mahanthesh B Mr. S. Vinothkumar Mr. Devaraja Mallesha Naik Mrs. K. Kasthuri Mr. J. Magesh Mrs. G. Ellammal Mr. A. Elaivarasu Mr.K. Sathiskumar

SVMC : <u>http://svmcugi.com/</u> CHRIST : <u>https://www.christuniversity.in/</u>

JEC : https://www.jecc.ac.in/

SRI VIDYA MANDIR ARTS AND SCIENCE COLLEGE (A



Affiliated to Periyar University, Salem -11 Accredited by NAAC with 'A' Grade [3.27] Recognized 2(f) & 12(B) under UGC Act of 1956 Katteri, Uthangarai, Krishnagiri – 636 902



International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021)

Organized by

Department Of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu in Collaboration with

Department of Mathematics, Christ (Deemed to be University), Bangaluru, Karnataka

&

Department of Mathematics, Jyothi Engineering College, Thrissur, Kerala



DAY- I (12.04.2021)	
TIME	PROGRAM SCHEDULE
9.00 AM - 9.30 AM	INAUGURAL FUNCTION
	Prayer Song
Welcome Address	Dr. J. SATISH KUMAR, Organizing Secretary, ICNTDEAM – 2021, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
Theme of the Conference	Dr. S. JAIKUMAR, Convener, ICNTDEAM – 2021, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
Felicitations	Thiru. V. CHANDRASEKARAN, Founder, Sri Vidya Mandir Educational Institutions, Uthangarai, Tamilnadu. Thiru. R. P. RAJEE, Secretary, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
	Dr. T. BALASUBRAMANIAN, Principal, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
	Dr. N. GUNASEKARAN, Vice Principal, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu. Dr. MAYAMMA JOSEPH, Head
	Department of Mathematics, Christ (Deemed to be University), Bangaluru. Dr. C. RAGAVAN, Head Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
Vote of Thanks	Dr. P. PALANI, Convener, ICNTDEAM – 2021, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.
TIME	SESSION – I
9.30 AM - 10.15 AM	Dr. A. GEORGE MARIA SELVAM Topic: Fractional Derivatives and Applications
10.15 AM - 11.00 AM	Dr. P. G. SIDDHESHWAR F.I.M.A.(U.K.), F.N.A.Sc Topic: Making sense out of differential equations without solving them.
11.00 AM - 11.15 AM	TEA BREAK
11.15 AM - 12.00 PM	Dr. SUNNY JOSEPH KALAYATHANKAL Topic: Fuzzy Modeling & Decision Making Applications in the Real World.
12.00 PM - 12.45 PM	Dr. S. R. SUDHEENDRA Topic: Mathematical Modelling of atmospheric Pollutions
12.45 PM - 1.30 PM	LUNCH BREAK
TIME	SESSION – II
1.30 PM - 2.15 PM	Dr. C. KANCHANA Topic : Break down of regular convective motion to Chaotic one at a threshold Eigen value in Hydrodynamics
2.15 PM - 3.00 PM	Prof. Dr. O. D. MAKINDE Topic: Modelling Thermal Boundary Layer of Magneto-Nanofluid with Inherent Irreversibility.
3.00 PM - 3.15 PM	TEA BREAK
3.15 PM - 4.00 PM	Dr. S. KARTHIKEYAN Topic: Functional Equations and its Applications

DAY- II (13.04.2021)		
TIME	SESSION - III	
9.30 AM -10.15 AM	Dr. MAHESHA NARAYANA Topic: Exact solution of Boundary value problems arising from Heat Transfer in Nano liquid flow due to quadratically stretching Sheet	
10.15 AM - 11.00 AM	Dr. S. KARTHIKEYAN Topic: Controllability of Semilinear Stochastic Dynamical Systems.	
11.00 AM - 11.15 AM	TEA BREAK	
11.15 AM - 12.00 PM	Dr. ESWARI PREM Topic: A Brief Introduction To Differential Equations And Its Applications In Mathematical Modelling	
12.00 PM - 12.45 PM	Dr. A. K. ABDUL HAKEEM Topic: Introduction to computational Fluid Dynamics.	
12.45 PM - 1.30 PM	LUNCH BREAK	
TIME	SESSION - IV	
1.30 PM - 2.15 PM	Dr. R. PRAKASH Topic: Shooting method is a technique of solving boundary value problems by using the methods for solving initial value problems.	
2.15 PM - 3.00 PM	Dr. A. TANUJA Topic: Complex differential Equations.	
3.00 PM - 3.15 PM	TEA BREAK	
3.15 PM - 4.00 PM	Dr. R. SOWRIRAJAN Topic: Option Pricing Models And Its Impact In Financial Markets	
4.00 PM - 4.30 PM	VALEDICTORY FUNCTION	
Welcome Address	Dr. S. PRANESH Department of Mathematics, Christ (Deemed to be University), Bangaluru.	
Presentation of the Conference Report	Dr. S. MUNIRATHINAM, Organizing Secretary, ICNTDEAM – 2021, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.	
Felicitations	Dr. T. BALASUBRAMANIAN, Principal, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu. Dr. N. GUNASEKARAN, Vice Principal,	
	Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu. Dr. MAYAMMA JOSEPH, Head Department of Mathematics, Christ (Deemed to be University), Bangaluru.	
FEEDBACK		
Vote of Thanks	Dr. P. PALANI, Convener, ICNTDEAM – 2021, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu.	
NATIONAL ANTHEM		

Report on

International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021),

12-13 Apríl 2021

Organized by



PG and Research Department of Mathematics Sri Vidya Mandir Arts and Science College (Autonomous) (Recognized 2(f) & 12(B) Under UGC Act 1956) Accredited with 'A' grade by NAAC [3.27] Uthangarai – 636 902, Krishnagiri, Tamil Nadu, India

In collaboration with



Department of Mathematics , CHRIST (Deemed To Be University), BENGALURU, KARNATAKA, INDIA



Department of Mathematics , Jyothi Engineering College , Thrissur, Kerala, India

Convener's of the Conference

Dr. S. Pranesh, M.Sc., M.Phil., Ph.D. Professor, Department of Mathematics, Christ University, Bengaluru.

Dr. S. Jaikumar, M.Sc., M.Phil., Ph.D. Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai. **Dr. P. Palani,** M.Sc., M.Phil., SET., Ph.D. Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Organizing Secretaries of the Conference

Dr. Joseph Varghese., M.Sc., M.Phil., Ph.D. Professor, Department of Mathematics, Christ University, Bengaluru.

> **Dr. J. Satishkumar,** M.Sc., M.Phil., Ph.D. Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai

> **Dr. S. Munirathinam,** M.Sc., M.Phil., Ph.D. Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai

> Ms I. Mohanadharshini, M.Sc. PG Student, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Conference Report

International Conference in Sri Vidya Mandir Arts and Science College

The PG & Research Department of Mathematics of Sri Vidya Mandir Arts & Science College has organized A Two day International Conference on 'New Trends in Differential Equations and Applied Mathematics (ICNTDEAM – 2021) on 12.04.2021 & 13.04.2021. The Inaugural Function was held on 29.01.2021 at 9.30 am with the welcome address was presented by Dr. J. Satish Kumar, PG & Research Department of Mathematics and Focal Theme of the Conference was presented by Dr. S. Jaikumar, PG & Research, Department of Mathematics. Thiru. V. Chandrasekaran, Founder of the College delivered the Presidential Address.

Mr. R.P. Rajee, Secretary of the College, Mr. P. Venkatachalam, Additional Secretary felicitated the gathering and, congratulated the Principal and Conference Organizers for their proficient efforts to organize the event of this magnificent shindig in a short span. Dr. T. Balasubramanian, Principal of the College delivered the felicitation address. Dr. N.

GUNASEKARAN, Vice Principal of the College delivered the felicitation address. Dr. MAYAMMA JOSEPH, Head, Department of Mathematics, Christ (Deemed to be University), Bangaluru. Dr. C. RAGAVAN, Head, Sri Vidya Mandir Arts & Science College, Uthangarai, Tamilnadu. During his speech, he emphasized the applications of Mathematics. Dr. P. PALANI, Assistant Professor of Mathematics delivered Vote of Thanks.

Subsequent to the Inaugural Function, Technical Sessions of the Conference were preceded. Dr. A. George Maria Selvam, Associate Professor and Head, Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, Vellore Dt.-635601. Topic: Fractional Derivatives and Applications.

Dr. P. G. Siddheshwar F.I.M.A.(U.K.), F.N.A.Sc.. Senior Professor of Mathematics, CHRIST (Deemed to be University), Hosur Road, Bengaluru - 560 029, India. Topic: Making sense out of differential equations without solving them.

Dr. Sunny Joseph Kalayathankal, Principal (Professor & Dean of Research), Jyothi Engineering College, Cheruthuruthy, Thrissur, Kerala. Topic: Fuzzy Modeling & Decision Making Applications in the Real World.

Dr. S. R. Sudheendra, Professor and Head, Department of Mathematics, School of Engineering, Presidency University, Bengaluru-560 089. Topic: Mathematical Modelling of atmospheric Polutions.

Dr Kanchana C. Research Expert,Instituto de Alta Investigación, Universidad de Tarapacá, Av. Luis Emilio Recabarren 2477, Iquique, Chile. Topic: Break down of regular convective motion to Chaotic one at a threshold Eigen value in Hydrodynamics.

Prof. O. D. Makinde, Faculty of Military Science, Stellenbosch University, Private Bag X2, Saldanha 7395, South Africa. Topic: Modelling Thermal Boundary Layer of Magneto-Nanofluid with Inherent Irreversibility.

Dr. S. Karthikeyan, Assistant Professor, Department of Mathematics, R.M.K. Engineering College, Kavarapettai-601206, Chennai. Topic: Functional Equations and its Applications.

Continue to the second Session Paper were presented by the presenters in different genres.

In the second day technical sessions of the conference was initiated by Dr. Mahesha Narayana, Department of Mathematics, The University of the West Indies,

Mona Campus, Kingston 7, Jamaica. Topic: Exact solution of Boundary value problems arising from Heat Transfer in Nano liquid flow due to quadratically stretching Sheet.

Dr. S. Karthikeyan, Assistant Professor, Department of Mathematics, Periyar University, Salem. Topic: Controllability of Semilinear Stochastic Dynamical Systems.

Dr. Eswari Prem, Assistant Professor, PG and Research Department of Mathematics, Govt. Arts College for Men,Krishnagiri - 635 001. Topic: A Brief Introduction To Differential Equations And Its Applications In Mathematical Modelling.

Dr. A. K. Abdul Hakeem, Assistant Professor of Mathematics, SRMV College of Arts and Science, Coimbatore – 641 020. Topic: Introduction to computational Fluid Dynamics.

Dr. Prakash. R, Associate Professor, Department of Mathematics, RV College of Engineering Mysuru Road, Bangaluru-560059. Topic: Numerical solution of Boundary Value Problems using Shooting method.

Dr. A. Tanuja, Assistant Professor, Department of Mathematics, Siddaganga Institute of Technology, Tumkur. Topic: Complex differential Equations.

Dr. R. Sowrirajan, Assistant Professor and Head, Department of Mathematics, Dr. N.G.P Arts and Science College, Kalapatti Road, Coimbatore - 641 048. Topic: Option Pricing Models and its impact in Financial Markets.

Totally around 810 participants and 105 paper presenters from around 49 universities and colleges have enthusiastically participated in the conference.

As per the written feedback of the professors, scholars and students, the International conference on New Trends in Differential Equations and Applied Mathematics has served its purpose sharing knowledge and wisdom in the field of Differential Equations and Applied Mathematics and made it a grand success.

The Valedictory Function of the Conference was scheduled at 4.00 pm on 13.04.2021 with the welcome address by Dr. S. PRANESH, Department of Mathematics, Christ (Deemed to be University), Bangaluru.

The Convenor and Organizing secretary of the Conference, Dr. S. Munirathinam, in his conference report, on behalf of the management, the principal, expressed a note of gratitude to all the eminent Professors, scholars and students who have come over from various institutions and Universities of different states and foreign countries. He also conveyed hearty thanks to all the committee members and students of the Mathematics department, for their tireless service and co-operation, the HODs and faculty members from other department of SVM College. And also thanked the Press personals, audio, video persons and all those who helped to make the conference a grand success.

Dr. T. BALASUBRAMANIAN, Principal, and Dr. N. GUNASEKARAN, Vice Principal of our College, in his valedictory address, appreciated that this kind of International conferences are rarely conducted with quality research papers, but this college has made it so successfully.

Dr. MAYAMMA JOSEPH, Head, Department of Mathematics, Christ (Deemed to be University), Bangaluru, felicitated over the conference, praising the wonderful organization of this conference.

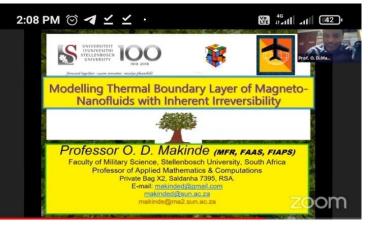
At the end, Dr P. Palani, Assistant Professor of Mathematics delivered Vote of Thanks. And the program ended with National Anthem.

International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021) 12-13 April 2021

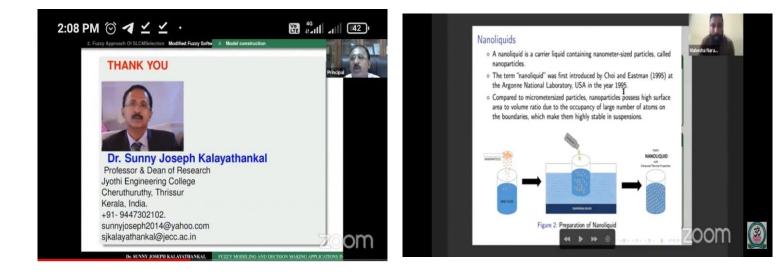


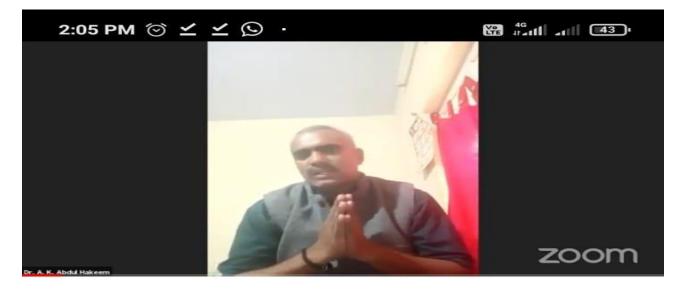
Day 1 : ICNTDEAM - 2021

 \sim



Day 1 : ICNTDEAM - 2021







 \sim

International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021) 12-13 April 2021







Day 2: ICNTDEAM - 2021



International Conference on New Trends in Differential Equations And Applied Mathematics (ICNTDEAM - 2021) 12-13 April 2021



ஊத்தங்கரை வித்யா மந்திர் கல்லூரியில் நடைபெற்ற பன்னாட்டு கருத்தரங்கில் கலந்து கொண்டோர்.

ஊத்தங்கரை, ஏப். 15: ஊத்தங் கரை ஸ்ரீ வித்யாமந்திர் கலை, அறிவியல் கல்லூரியில் (தன் னாட்சி) கணிதத் துறை சார்பில் வேறுபட்ட சமன்பாடுகள் மற் றும் பயன்பாட்டு கணிதத்தில் புதிய போக்குகள் என்ற தலைப் பில் பன்னாட்டு கருத்தரங்கம் இரண்டு நாள்கள் நடைபெற் றது.

முன்னதாக கருத்தரங்கில் கணிதத் துறை தலைவர் ராக வன், கல்லூரியின் முதல்வர் த. பாலசுப்பிரமணியன், செய லர் ஆர்.பி. ராஜீ, கிறிஸ்ட் பல் கலைக் கழசு கணிதத் துறைத் தலைவர் மாயம்மா ஜோசப், ஜோதி பொறியியல் கல்லூரி

முதல்வர் சன்னி தோசப் ஆகி யோர் கருத்தரங்கின் வரவேற்பு நிகழ்வில் பங்கேற்று சிறப்புரை யாற்றினர்.

இந்நிகழ்வில் கல்லூரித் தாளா எர் சேகரன் தலைமை வகித்தார். து. சதீஷ்குமார் அனைவரையும் வரவேற்றார். ஜெய்குமார் கருத் தரங்கின் மையக்கருத்து குறித்து ஆய்வுரையாற்றினார். இறுதி யாக பழனி நன்றி கூறினார்.

இக்கருத்திரங்கில் தென் ஆப் பிரிக்காவைச் சேர்ந்த மார்க் கிண்டே, ஜமைக்காவைச் சேர்ந்த மகேஷா நாராயணா, கிலியைச் சேர்ந்த காஞ்சனா, பெங்களூ ரைச் சேர்ந்த சித்தேஸ்வர், கிருஷ் ணகிரி ஈஸ்வரிபிரேம், திருப்பத் தூர் ஜார்ஜ் மரியாசெல்வம், கோயம்புத்தூர் அப்துல் ஹக் கீம், பெங்களுரு சதேந்திரா, சேலம் சார்த்திகேயன், சென்னை சார்த்திகேயன், போன்ற பல்வேறு பகுதிகளைச் சேர்ந்த பல்கலைக் சுழக பேராசிரியர்கள் பங்கேற்று கலந்துரையாடினர்.

மேலும் இக்கருத்தரங்கில் மொத் தமாக 1,326 பேர் பங்கேற்று பயன் பெற்றனர். 68 ஆய்வறிக்கைகள் சமர்ப்பிக்கப்பட்டன. சுல்லூரி தாளாளர் வே. சந்திரசேகரன் நிறைவு விழாவில் தலைமை உரை யாற்றினார். கல்லூரிச் செயலர் ஆர். பி. ராஜீ மற்றும் துணைச் செயலர் வெங்கடாசலம் வாழ்த்தி பேசினர்.