



SACRED HEART COLLEGE (AUTONOMOUS)

(Affiliated to Thiruvalluvar University, Vellore)

Accredited by NAAC (4th Cycle – under RAF) with CGPA of 3.31/4 at 'A+' Grade

Report on Virtual International Conference on Recent Advancements in Mathematics 09th & 10th April 2021

Organised by

**PG and Research Department of Mathematics
Tirupattur – 635601, Tamil Nadu, India**

in collaboration with

Academia for Advanced Research in Mathematics

A Virtual International Conference on Recent Advancements in Mathematics ICRAM 2021 Organised by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur, Tamil Nadu, India in collaboration with Academia for Advanced Research in Mathematics (AARM Society) was held on 9th & 10th April 2021. More than 150 participants actively participated in the conference and presented 148 research papers. The conference started on 09.04.2021 with the welcome address by **Dr. V. Balaji**, Assistant Professor, Department of Mathematics & **Convener (ICRAM 2021)** followed by the inaugural address by **Rev. Dr. D. Maria Antony Raj**, SDB, Principal. **Dr. A. George Maria Selvam**, PG Head, Department of Mathematics & **Chair Person (ICRAM 2021)** gave the introductory words and also presented the first speaker of the day **Dr. P.K. Kishore Kumar**, Assistant Professor, University of Technology and Applied Sciences, Al Musannah, Sultanate of Oman. Dr. P.K. Kishore Kumar enlightened all the participants on the title 'A Review on Fuzzy, Intuitionistic Fuzzy, vague and Neutrosophic Graphs'. **Dr. R.Murali**, UG Head, Department of Mathematics introduced the second speaker of the day **Dr. S. Dheva Rajan**, Assistant Professor, University of Technology and Applied Sciences, Al Musannah, Sultanate of Oman. He enlightened all the participants on the title 'Developing a Mathematical Model for Infectious Disease'. The morning session ended with the vote of thanks by **Dr. B. Govindan**, Assistant Professor, Department of Mathematics & **Organising Secretary (ICRAM 2021)**. The afternoon session was dedicated to the paper presentation by delegates from various colleges and was parallelly conducted by the following session chairpersons from the Department of Mathematics, **Dr. G. Britto Antony Xavier, Dr. T. G. Gerly, Dr. B. Chandra Sekar, Dr. B. Govindan, Dr. D. Ajay, Dr. M. Antony Arockiasamy, Dr. S. John Borg, Dr. S. Kalaiarasi and Dr. S. U. Vasanthakumar.**

On 10.04.2021 the session started with the welcome address by **Dr. V. Balaji**, Assistant Professor, Department of Mathematics & **Convener (ICRAM 2021)** followed by the inaugural address by **Dr. A. George Maria Selvam**, PG Head, Department of

Mathematics & **Chair Person (ICRAM 2021)**. **Rev. Dr. S. John Borg**, PG Head, Department of Mathematics (Shift - II) introduced the first speaker of the day **Dr. P. Francis**, Post - Doctoral Fellow, Department of Computer Science, IIT, Palakkad, Kerala, India. He enlightened all the participants on the title 'On Domatic and Total Domatic Numbers of Product Graphs'. **Dr. S. U. Vasanthakumar**, UG Head, Department of Mathematics (Shift-II) introduced the second speaker of the day **Dr. V. Raja** Assistant Professor, Department of Mathematics, PSG College of Technology, Coimbatore – 6410 04, who enlightened all the participants on the tile Structure of Tree-Like Graphs.

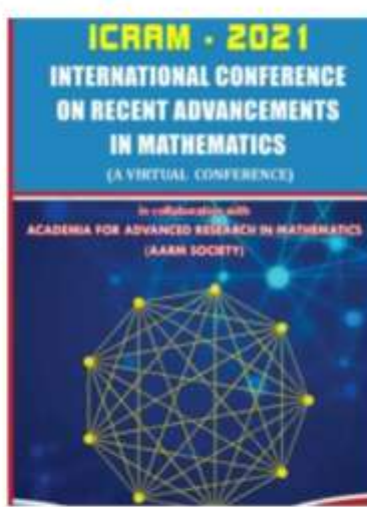
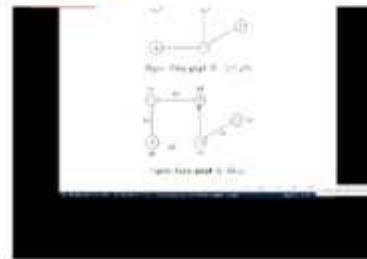
Dr. G. Britto Antony Xavier, introduced the Academia for Advanced Research in Mathematics (**AARM Society**) to the participants. The morning session ended with the vote of thanks by **Dr. B. Govindan**, Assistant Professor, Department of Mathematics & **Organising Secretary (ICRAM 2021)**. The afternoon session was dedicated to the paper presentation by delegates from various colleges and was parallelly conducted by the following session chairpersons from the Department of Mathematics, **Dr. G. Britto Antony Xavier, Dr. T. G. Gerly, Dr. B. Chandra Sekar, Dr. B. Govindan, Dr. D. Ajay, Dr. M. Antony Arockiasamy, Dr. S. John Borg, Dr. S. Kalaiarasi and Dr. S. U. Vasanthakumar.**



- Don't Memorise
- Assistant Professor Balaji V

- anuradha deshpande
- arline jayramy
- Assistant Professor Balaji V

- Don't Memorise
- Dr. Kishore Kumar RK
- maria ANTONY



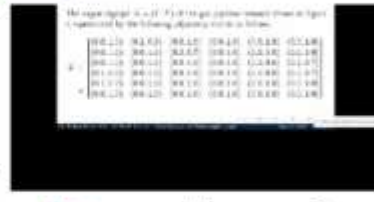
- Joy Beaula
- K. Janofer
- Keerti Vardhan Madahar



- kithieramma cathrine
- Krishiv Saravana Prabu
- Krishiv M



- Joy Beaula
- K. Janofer
- Keerti Vardhan Madahar



- Dr. Kishore Kumar RK
- Assistant Professor Balaji V
- Dr. Kishore Kumar RK
- Also in the meeting (93)



George Maria Selvam



Assistant Professor Balaji V



(63)

- Dr. Isaiyandi Thangaraj
- Dr. Kailash Chandra Petwal
- Dr. Kishore Kumar PK.

- DhevaRajan Srinivasavara...
 - Assistant Professor Balaji V
- Also in the meeting (76)

- Mohammed Yasin
- Mohana mathi
- Murali Ramdoss



REC

(84)

[A VIRTUAL CONFERENCE]

In collaboration with
ACADEMIA FOR ADVANCED RESEARCH IN MATHEMATICS (AARM SOCIETY)

Organized by
PG & RESEARCH DEPARTMENT OF MATHEMATICS SACRED HEART COLLEGE (AUTONOMOUS)

Developing Mathematical model for an Infectious disease

Dr. S. Bharan Rajan
Department of Information Technology
University of Technology and Applied Sciences, Al-Basrah

- DhevaRajan Srinivasavara...
- Assistant Professor Balaji V
- Dr. Kishore Kumar PK.

Some applications of Lotka-Volterra

- Lotka-Volterra model using Euler's method
- Lotka-Volterra model using Runge-Kutta method
- Lotka-Volterra model using MATLAB

BIFURCATION ANALYSIS

It involves studying the dependence of the solutions of the system on the parameters of the system. It is a powerful tool for studying the qualitative behavior of the system. It is used to study the stability of the system and to find the bifurcation points.



B. Govindan Govind

- Ms. T.G. Gerly Assistant Pr...
- NAGISETTY JYOTHI 20P...

- Assistant Professor Balaji V
- Assistant Professor Balaji V
- B. Govindan Govind

- Arfin Bena E
- Ashok Kumar Jaiswal
- Assistant Professor Balaji V

Assistant Professor Balaji V

(61)

- Assistant Professor Rev. F. ...
- Assistant Professor Balaji V
- George Maria Selvam

REC

V

Vasantha Kumar S.U Assistant Professor

(71)

- susi's view
- Swatnam Sepur

Raja Vellaisammy

(71)

- Raja Vellaisammy
- Raja Vellaisammy
- Gladys Pete

Composition of a.c. lines of order 3

(73)

- Cherin Monish Fernila L.T
- Dhivya M
- Divya Anand

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 PG & RESEARCH
 DEPARTMENT OF MATHEMATICS
 SACRED HEART COLLEGE
 (AUTONOMOUS)
 TRIPATTUR - 632 601

09th & 10th April 2021

Composition of a.c. lines of order 3

(72)

- Raja Vellaisammy
- Hardeep Singh
- Raja Vellaisammy

Composition of a.c. lines of order 3

(76)

- Assistant Professor Balaji V
- Assistant Professor Balaji V
- B.Govindan Govind

There is a teacher and a student.
 There are always some things left to learn.

(71)

- Raja Vellaisammy
- Raja Vellaisammy
- Priyanka Sthavarnath

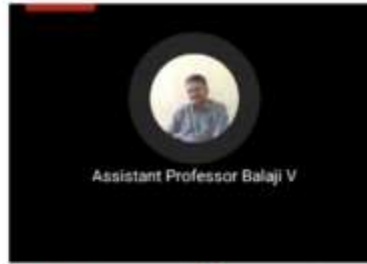
B.Govindan Govind

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- Anin Bena E
- Ashok Kumar Jaiswal
- Assistant Professor Balaji V
- Assistant Professor Balaji V



George Maria Selvam



Assistant Professor Balaji V



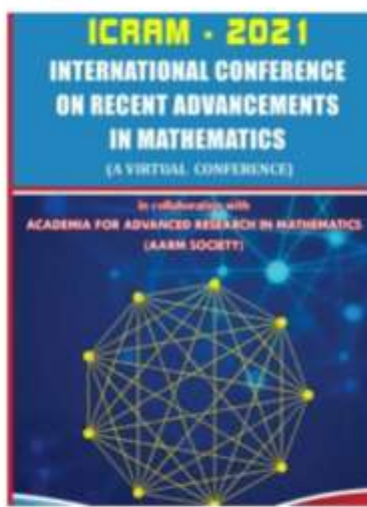
- Assistant Professor Rev. F...
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- Anlin Bena E
 - anuradha deshpande
 - Assistant Professor Balaji V

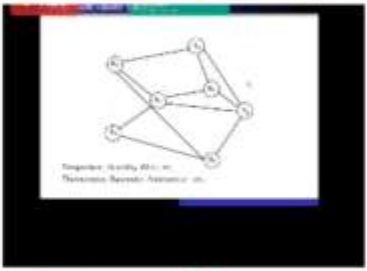
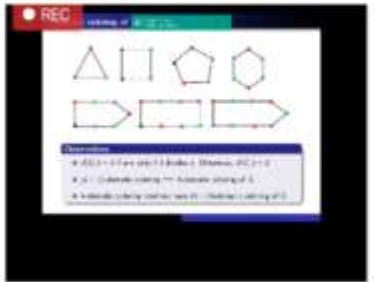
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- Assistant Professor Rev. F...
 - Assistant Professor Balaji V
 - George Maria Selvam



Francis Xavier



- (71)
- Francis Xavier
 - Assistant Professor Balaji V



- (77)
- Anlin Bena E
 - anuradha deshpande
 - Assistant Professor Balaji V

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- Francis Xavier
 - Assistant Professor Balaji V
 - Francis Xavier

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- Francis Xavier
 - Assistant Professor Balaji V
 - Francis Xavier



ABOUT US

The Academy of Mathematics, as one of the oldest and the most illustrious institutions in Tamil Nadu College, has established the association with Dr. D. S. Sivasubramanian, the Principal as its patron. This is a move to bring all the mathematicians under one umbrella. Each annual will encompass the publications and presenting to the field of research and publications. The association has already 200 life members registered in the records of the academy.

The first general body meeting was held on 26 February 2021 and was attended by Dr. D. S. Sivasubramanian, the secretary of the college. It was decided that the research and facilities of this society should be for the development of rural regions. During the same meeting, the office bearers namely Dr. Srinivasan, Srinivasan (President), Dr. Aranganathan (Secretary), Dr. Subramanian (Treasurer) and other members were elected.

The society holds great promise for the future as many who are devoted to research in mathematics of high repute have offered collaboration to the past of the society. It would also be of great benefit to the college as many such students who take up research in Mathematics will benefit from the great expertise of its members and keep all its activities in motion. Within two months of its initiation, the society has taken forward its regular administrative work as on 27 February 2021 with delegates coming from all round the globe.

