



HOLY CROSS COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI-620002

PG & RESEARCH DEPARTMENT OF MATHEMATICS

MATHEMATICS ASSOCIATION REPORT(2020-2021)

The inaugural meeting was held on 23rd June 2020 for electing the office bearers of the Mathematics Association for the academic year 2020-2021. The first meeting was held on 30th June 2020. **Dr. A. Nagoor Gani**, Associate Professor, PG & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli gave a lecture on the topic **“Optimization Models Using Fuzzy Numbers”**. Dr. W. Ritha, Head and Assistant Professor, PG and Research Department of Mathematics, Holy Cross College (Autonomous), Trichy, welcomed the resource person and the gathering. The lecture primarily focused on Optimization models and it gave a brief idea about fuzzy production quantity models and fuzzy supply chain model. The participants gained knowledge about fuzzy linear system of equation and fuzzy linear programming problem, algorithm for Motzkin Elimination method with the help of numerical illustrations.

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College with Potential for Excellence
Tiruchirappalli - 620002.

PG & Research Department of Mathematics
Organizes a Webinar on

Optimization Models using Fuzzy Numbers

Presented by

June 30th
10.00 a.m.
to
11.00 a.m.

Dr. A. NAGOOR GANI
Associate Professor,
PG & Research Department of Mathematics,
Jamal Mohamed College (Autonomous),
Tiruchirappalli- 620020

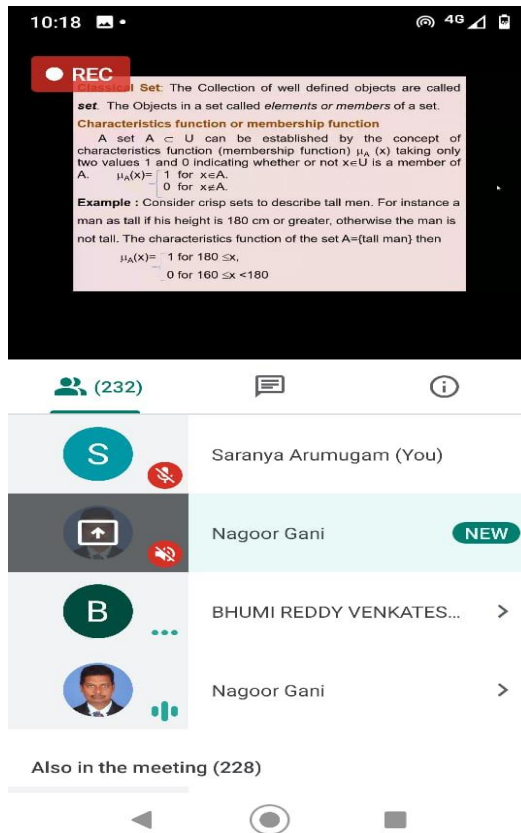
Via
Google Meet

Presided by
Rev. Dr. (Sr.) A. Christina Bridget
Principal,
Holy Cross College (Autonomous),
Tiruchirappalli-620 002.

Organized by
Dr. W. Ritha
Head and Assistant Professor,
PG & Research Dept. of Mathematics,
Holy Cross College (Autonomous),
Tiruchirappalli -620002.

Register Now!

No Registration Fee and E-Certificate will be provided



In order to motivate the participants in the field of research, a session was organized by the Mathematics Association on 25th July 2020. **Dr. Anjaly Kishore**, Assistant Professor, Department of Mathematics, Vimala College(Autonomous), Trissur, Kerala, was the resource person. She delivered a lecture on the topic “**Applications of Various Divisions of Mathematics in Graph Theory**”. The ideas for research especially on applications of Topology and Linear algebra in Graph theory was discussed in this session. Madam explained about graph embedding in topological spaces along with few restrictions for it; Jordan curve theorem, Jordan Schonflies theorem based on the same.

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PG AND RESEARCH DEPARTMENT OF MATHEMATICS

*State Level Webinar on
 Applications of Various divisions of
 Mathematics in Graph Theory*

Resource Person
 Dr.Anjaly Kishore,
 Assistant Professor,
 Department of Mathematics,
 Vimala College(Autonomous),
 Trissur,Kerala.

Presided by
 Rev.Dr.(Sr.)A.Christina Bridget,
 Principal,
 Holy Cross College(Autonomous),
 Tiruchirappalli-620 002.

DATE: 25.07.2020 **TIME: 10.00 A.M-11.30 A.M**

Convenor
 Dr.W.Ritha,
 Head and Assistant Professor,
 PG and Research Department of Mathematics,
 Holy Cross College(Autonomous),
 Tiruchirappalli-620 002.

Join us

 Google meet

No Registration Fee
 &
 E-Certificate will be issued

Register Now

10:11 4G

REC

(102)

Saranya Arumugam (You)

Anjaly Kishore **NEW**

Ritha Prakash >

Antonitte Vinline >

Also in the meeting (98)

Next meeting was conducted on 1st August 2020, on the topic “**Designing Finite State Automata**”. **Dr.T. Rajaretnam**, Head and Associate Professor, PG & Research Department of Mathematics, St. Joseph’s College (Autonomous), Tiruchirappalli, was the resource person. He gave detailed explanation on string catenation, transition diagram and regular expressions. He mainly focused on designing finite automata discussing the classification of automata such as Deterministic Finite State Automation (DFA) and Non-Deterministic Finite State Automation (NFA) with appropriate illustrations.



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*PG & Research Department of Mathematics
Organises a webinar on*

DESIGNING FINITE STATE AUTOMATA


Presided by
Rev. Dr. (Sr). A. Christina Bridget
Principal
Holy Cross College (Autonomous)
Tiruchirappalli-620 002


Resource Person
Dr. T. Rajaretnam
Head and Associate Professor
PG & Research Department of Mathematics
St. Joseph's College (Autonomous)
Tiruchirappalli-620 002

Date: 01.08.2020
Time: 10.00 a.m to 11.30 a.m

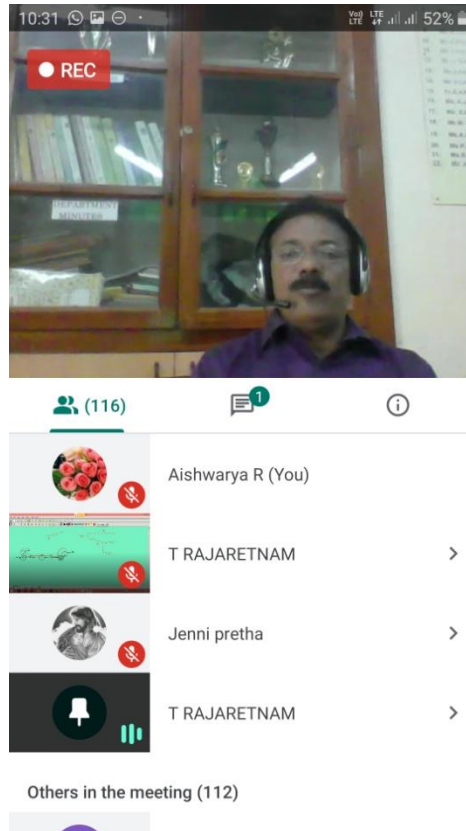
Join us @

Google Meet



Organised by
Dr. W. Ritha
Head and Assistant Professor
PG & Research Department of Mathematics
Holy Cross College (Autonomous)
Tiruchirappalli-620 002

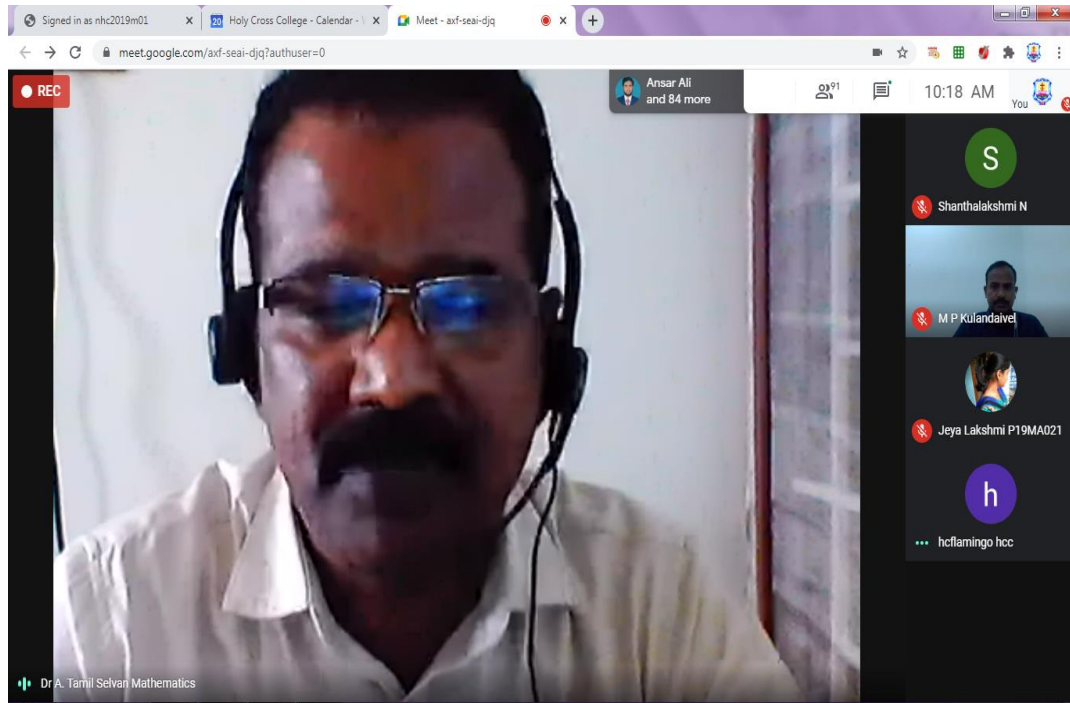
No Registration Fee & E-Certificate will be provided.



To equip the students with the knowledge on Mathematics applications in current scenario, two days international seminar was organized on 16th& 17th November 2020 on the topic **“Present Trends in Applications of Mathematics”** with four Technical Sessions. Dr.A. Tamilselvan, Professor and Head, Chair, School of Mathematical Sciences, Bharathidasan University, Trichy, inaugurated the international seminar through mathematical modeling on 16th November 2020. The technical session I was conducted by **Dr. M.P. Kulandaivel**, Professor, Mathematics Section, Department of Information Technology, University of Technology and Applied Sciences - Al Mussanah, Sultanate of Oman. He spoke on the topic **“Advances in the Applications of Differential Equations”** which kept the audience spell bound. **Dr. S. Rajeshwari**, Assistant Professor, Department of Mathematics, Presidency University, Bangalore, handled the Technical Session II on the topic **“Applications of Complex Analysis in Science and Engineering”**. The talk delivered by the resource person insisted that

complex numbers find greater applications in the complex field of Physics, Computer science, Electrical and Mechanical area, thereby motivating the audience to contribute substantially in the above areas by the use of complex functions.

On 17th November 2020, the 2nd day of the International seminar, technical Session III was handled by **Dr. Rajendran Swamidurai**, Associate Professor, Department of Mathematics and Computer science, Alabama State University, United States of America, on the topic “**Mathematics for Big Data Analytics**”. The resource person elucidated the exponential growth of big data and its vast opportunities and also emphasized the bright future for the mathematicians in the field of big data analytics. Technical Session IV was taken by **Dr. Mary George**, Associate Professor and Head (Rtd), Department of Mathematics, Mar Ivanios College, Trivandrum. She spoke on the topic “**The Profound Applications of Mathematics: From 'Counting' to 'Covid-19' and Beyond**”. This session discussed the applications of mathematics in various fields like satellite navigation, weather prediction, population dynamics, construction, air transportation, traffic optimization, finance and banking, speech recognition, ATM security etc. The lecture mainly focused on applications in medical sciences and the role of the Fuzzy Mathematics in detail in the pandemic situation of COVID-19. After the technical sessions, 32 research papers were presented by the participants after scrutinizing the research papers received from all over India and the papers were also published in UGC-CARE list journal.



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REC | M P Kulandaivel is presenting | san jo and 88 more | 10:38 AM | You

Advances in the Applications of Differential Equations

Monologue by
Dr. M.P. Kulandaivel
Mathematics Section
Department of Information Technology
University of Technology and Applied Sciences-AI Mussanah
Sultanate of Oman
mpkoman@gmail.com

St. Joseph's College (Autonomous)
Tiruchirappalli, TamilNadu, India.
Since 1844

LOYOLA ALUMNI
Kulandaivel M p
Batch : 1999-2001
LAC-LCAS-19992001-1001

جامعة التقنية والعلم التطبيقية المصنعة
University of Technology and Applied Sciences - AI Mussanah

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Shanthalakshmi N
M P Kulandaivel
Sreelekha B
Antonitte Vinoline

Signed in as nhc2019m01 | Inbox (117) - hccwebhost@hcc... | Holy Cross College - Calendar | Meet - International Webinar

meet.google.com/axf-seai-djq?authuser=0

REC | Rajendran Swamidurai is presenting | Mehataj Farhana and 94 more | 10:15 AM

Mathematics for Big Data Analytics

Dr. Rajendran Swamidurai
(PhD in Software Process, Auburn University, USA)
Professor and Coordinator, Computer Science
Associate Director, STEM Center of Excellence for Modeling and Simulation
Director, Software Engineering and Complex Systems Lab

Alabama State University, USA

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Rajendran Swamidurai
shanthini sandhiya
Anto Liyancy
Ritha Prakash

Google | Inbox (4) - antonittevinoline@hc... | My Drive - Google Drive

drive.google.com/drive/my-drive

THE PROFOUND APPLICATIONS OF MATHEMATICS: FROM 'COUNTING' TO 'COVID-19' AND BEYOND


Dr. Mary George

1:43:21

1:18:54 / 2:17:58

2:43 PM 11/19/2020

To make the students aware about the job opportunities, a session on “**Career Guidance**” was conducted on 28th January 2021. The Resource person was **Mr.Rajendran**, Director, ICON's IAS academy, Thillai Nagar, Trichy. The lecture detailed about the job opportunities available in Central Government and State Government exclusively for mathematics students. He insisted on the importance of communication skills and resume writing to get a better job.



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on

CAREER GUIDANCE

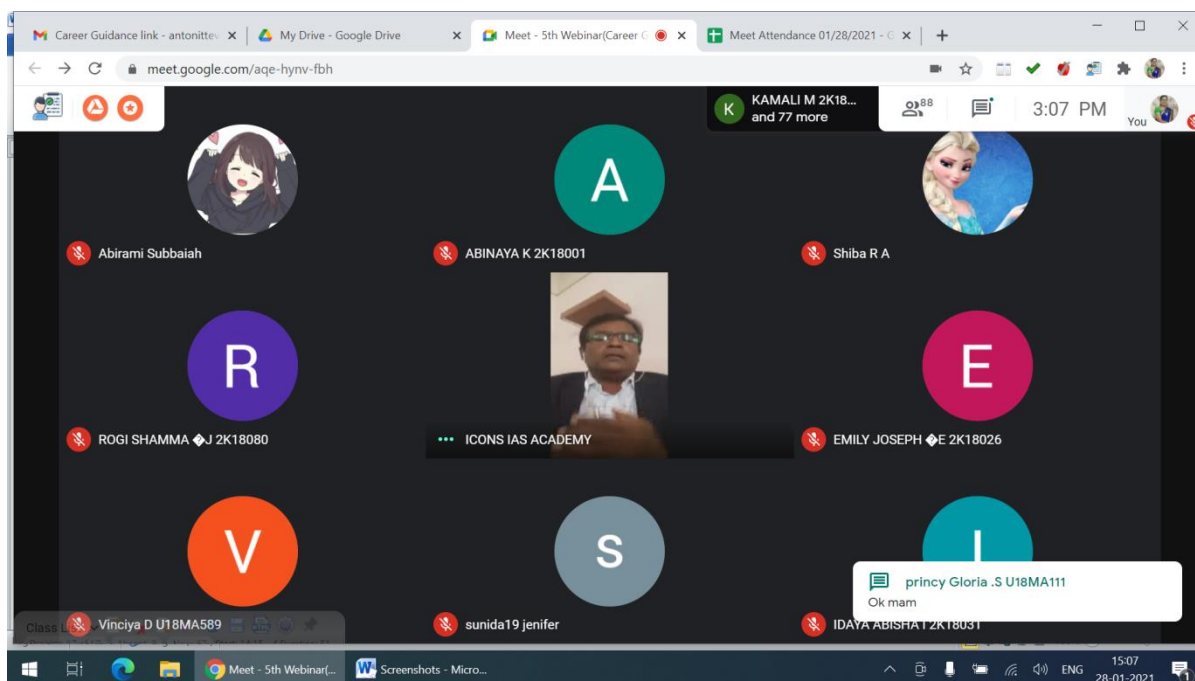
Presided by Rev. Dr. (Sr.) A. Christina Bridget, Principal, Holy Cross College (Autonomous), Tiruchirappalli-620 002.	Resource Person Mr. Rajendran Director, ICON's IAS Academy, Thillai Nagar, Tiruchirappalli-620 018.
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Date : 28.01.2021
Time : 3.00 p.m to 4.00 p.m


Join us @




This Webinar is exclusively for III UG Students of Mathematics, HCC.




The next meeting was organized by the Mathematics Association on 16th February, 2021 on the topic “**Self- Directed Learning**”. The resource person was **Ms. R. Roseline Mary**, Assistant Professor, CHRIST Deemed to be University, Bangalore, Karnataka, India. The guest lecture strongly motivated the students that they are capable of self-directed learning and must try to develop the skill of self-directed learning. She also suggested popular online resources for self- directed learning.


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PG & Research Department of Mathematics
organises a webinar
on
SELF DIRECTED LEARNING




Presided by
 Rev. Dr. (Sr.) A. Christina Bridget,
 Principal,
 Holy Cross College (Autonomous),
 Tiruchirappalli-620 002.



Resource Person
 Ms. R. Roseline Mary
 Assistant Professor,
 Department of Computer Science,
 CHRIST Deemed to be University,
 Bangalore - 560029, Karnataka, India.

Date : 16.02.2021
Time : 6.00 p.m to 7.00 p.m

Join us @


This Webinar is exclusively for PG Students of Mathematics, HCC.

Link - antonittevinonline@hccrct... Meet - Webinar - Self Direct... meet.google.com/ucf-bjnu-ef

Roseline Mary Computer Science is presenting

Sathiya Chellad... and 81 more 6:20 PM

Why Self- Directed Learning?

Employment Aspect



Recruiter's
Speak

Trainable

Adaptable

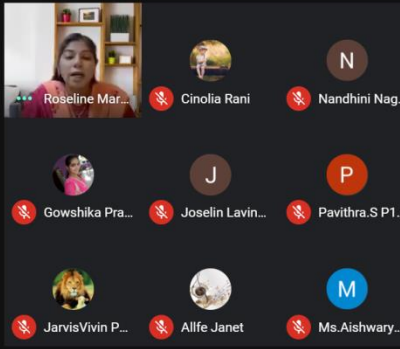
Employable

Resourceful

Employers prefer multi-skilled, resourceful candidates for recruitments.

dharshini sambandam has left the meeting



Webinar - Self Directed Lea... Raise hand Turn on captions Roseline Mary Computer Scie... is presenting

18:20 16-02-2021

Self-Directed Learning - Initiatives

- Designing learning experiences.
- Diagnosing learning needs.
- Formulating learning goals.
- Identifying resources for learning.
- Choosing and implementing learning strategies.



A grid of 12 participant avatars is visible on the right side of the screen. The participants are: Evanjalie am..., Cinolia Rani, Roseline Mar..., Nandhini Nag..., Mariya Vincily, KARUNYA I S..., Josefin Lavin..., Alife Janet, and Daisy Sophia. Some avatars are partially obscured by letters (N, M, J, D).

Webinar - Self Directed Learning ^

Microphone, Video, Screen Share, and Checkmark icons.

Raise hand Turn on captions Roseline Mary Computer Scie... is presenting