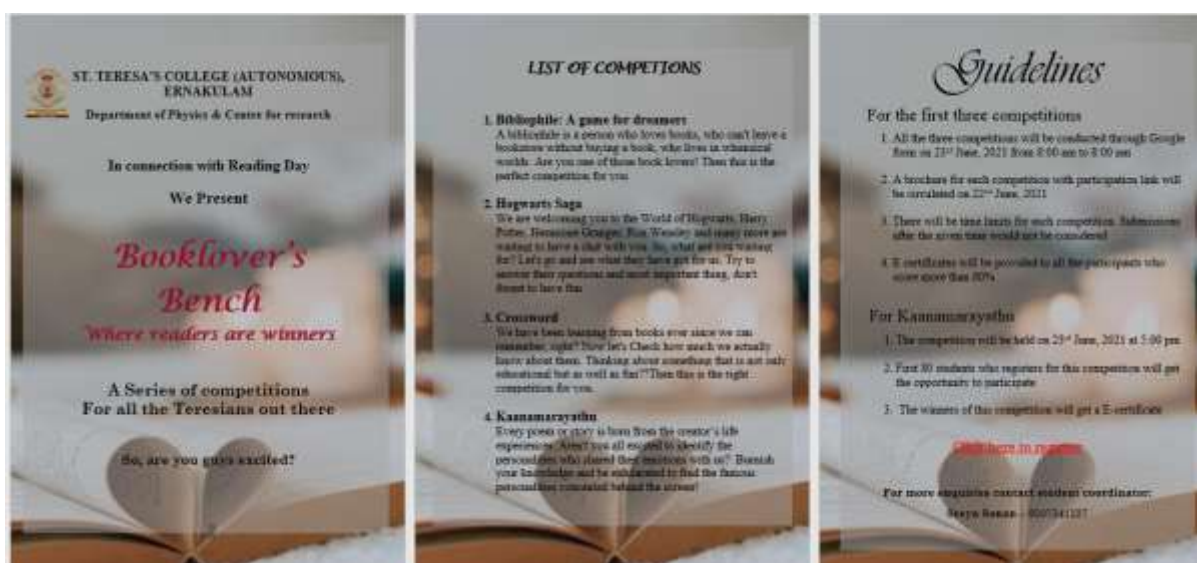


Department of Physics & Centre for Research

Activities of Physics Association 2021-2022

1. READING WEEK.

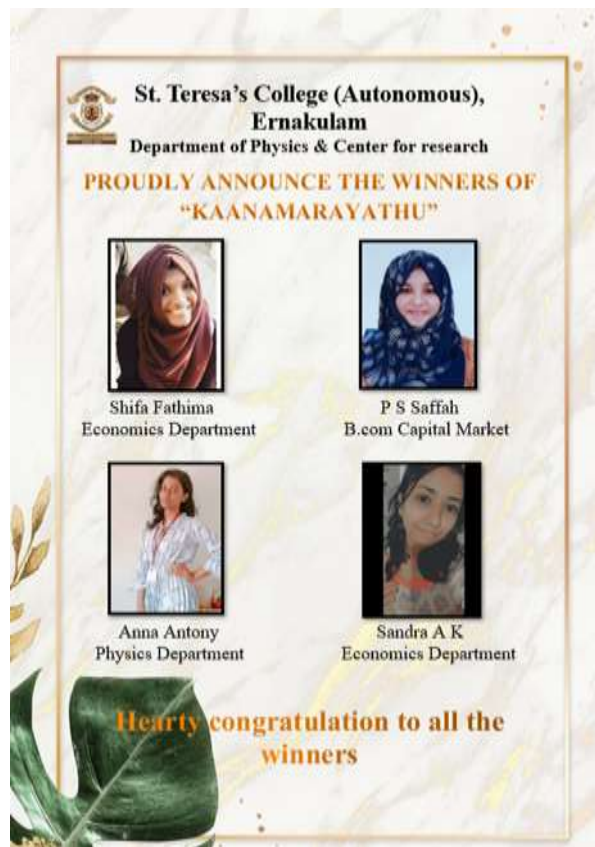


As part of the Reading Day on 23rd June 2021, the Department of physics and centre for research of St. Teresa's College (Autonomous), Ernakulam has organised "Booklover's Bench" - a series of competitions. The objective of the competition was to ignite the bibliophile in the participants, spread awareness on the importance of reading and show how reading can be a healthy addiction.

The competition was conducted online mode. Offline competitions include bibliophile, Hogwarts saga and crossword. These competitions started at 8:00 am and ended at 8:00 pm. 227 participants from different departments took part in the competition from which 35 cleared the winning criteria.

The competition "Kaanamarayathu" started at 5:00 pm, on the same day. 38 participants from different departments took part in the competition. The first position was secured by Shifa Fathima of the History Department, the second position was shared by P S Saffah of B.com

Capital Market and Anna Antony of the Physics Department and finally, the third position was secured by Sandra A. K of Economics Department.



All the participants and winners of all four competitions were awarded E Certificates. However, everybody enjoyed the series of competitions and highly appreciated the organizers. The Event revealed many aspects of reading before the participants.

2. BHARATH KA AMRUTH MAHOTSAV - 75TH INDEPENDENCE DAY CELEBRATION



In connection with the 75th Independence Day celebrations (BHARATH KA AMRUTH MAHOTSAV), the department of Physics and center for research had organized an inter-department quiz competition entitled “IMPRINTS OF THE PAST”. The first and second round of quiz competition were conducted on 13th and 14th August 2021 respectively. The winners of the competition are

Position	Name	Department
First	Shifa Fathima	History
Second	Adiya Salbi	Physics
Third	Jaliya Saji	History




3. SWISS GOVERNMENT EXCELLENCE SCHOLARSHIP 2022-23



Department of Physics and Centre for Research, St Teresas college, conducted a webinar on "Swiss Government Excellence Scholarship 2022-23" on 17th August 2021 at 12 pm. The resource person for the day was Dr. INDRANEEL GHOSE. He works at the Embassy of Switzerland in India as the Senior Thematic Advisor for Education, Research and Innovation. The main objective of this talk was to bring an awareness among the aspiring students regarding

the opportunities especially regarding the funding for carrying out their future studies in Switzerland. He elucidated the procedures as well as different options of fundings for prospective students who are considering to pursue their further studies in Switzerland. The talk ended with a Q & A, wherein Dr Indraneel cleared up all the further doubts regarding the same. The talk turned out to be very informative as well as encouraging to all the students who are inspiring to study abroad. The session ended with a Vote of Thanks.

4. Dr. ANNIE JOSEPH VALLAMATTOM MEMORIAL STATE LEVEL PROJECT PRESENTATION COMPETITION 2021-22

<p>Call For Abstracts</p> <p>About Application:- Who can apply : M.Sc Physics pass out students, of 2020-21.</p> <p>How to apply: Click on the link below, fill the form & submit your M.Sc. project abstracts.</p> <p>https://forms.gle/TJdKAVt1dWsqk3M</p> <p>Last date of application: 18 September, 2021</p> <p>Date of Competition: 23 September, 2021</p> <p>E-Certificates will be issued to the participants & cash prizes will be given to the first three winners</p> <p>Updates of the competition will be intimated via WhatsApp group.</p> <p>Organising team</p> <p>Dr. Priya Parvathi Annesa Jose (H.O.D) Smt. Susan Mathew (Convener) Dr. Kala M.S Dr. Mary Vinaya Dr. Sreelakshmi A Smt. Miss Pinar Dr. Mariyam Thomas Dr. Susan Kurian Thottil Dr. Anuja K Nair Dr. Sreeja Saagorath Student Coordinators Bharathi Eliza Bhanu, Sreya Susan, V U Sreeranjini Pai For more info: 9896447318</p>	<div style="text-align: center;">  </div> <p>Dr. Annie Joseph Vallamattom, former Head and research guide of Department of Physics, St. Teresa's College, Ernakulam left for heavenly abode on 12th June 2012. Her contribution to the Department and her compassionate nature will be remembered gratefully by all of us.</p> <p>In her loving memory, the Department of Physics organizes an inter collegiate state level project presentation competition for M.Sc Physics students every year since 2013. This competition provides a platform to the current year pass out M.Sc Physics students to present their M.Sc projects. This year also, we are conducting the same in the online mode, due to the pandemic situation.</p> <p>We expect your whole hearted contributions for the successful conduct of this programme.</p>	<div style="text-align: center;">  </div> <p>St. Teresa's College (Autonomous), Ernakulam Department of Physics & Centre for Research</p> <div style="text-align: center;">  </div> <p>Dr. Annie Joseph Vallamattom Memorial State Level Project Presentation Competition 2021-22</p>
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Physics Association 2021-22

Department of Physics and Centre for Research of St. Teresa's College had organized Dr. Annie Joseph Vallamattom Memorial State Level Project Presentation Competition on 23rd of September 2021. Dr. Annie Joseph Vallamattom was the former head and research guide of Department of Physics, St. Teresa's College, Ernakulam. She left for heavenly abode on 12th of June 2012. In her loving memory, the Department of Physics organizes an inter collegiate state level project presentation competition for MSc Physics students every year since 2013. This competition provides a platform to the current year (2020-21) pass out MSc Physics

students to present their MSc Projects. This year also we conducted the same in online mode due to the pandemic situation.

13 students from various academic institutions in Kerala, participated in the competition. Dr. Priya Parvathy Amina Jose (Head of the Department) gave the welcome speech. Dr. Tharanath R, Assistant Professor, Department of Physics, Aquinas College, Edakochi and Dr. Smitha Joseph, Head of Department of Physics, Bishop Chulaparambil Memorial College, Kottayam were the judges for the project competition. Cash prizes and certificate were issued to the winners. Varsha Felsy from Maharajas College, Ernakulam, Anu V Y and Merin Joby from St. Teresa's College, Ernakulam won first, second and third prize respectively

5. SPACE WEEK 2021-2022



As part of Space Week on 4th October 2021, Physics Association conducted an event ‘‘QUASAR’’ under the guidelines of Smt. Susan Mathew and HOD Dr. Priya Parvathy Ameena Jose. One-week event was launched which commenced on 4th October, 5:30pm and went on 8th October, 5:30pm. The main objective of the event was to propagate knowledge about space. The event contained inter departmental competitions.

On 8th October, 5:30pm we conducted a PowerPoint presentation, videos and games (ESPACIO & INTO THE COSMOS). The PowerPoint presentation was all about the life of women space travelers Kalpana Chawla, Sunitha Williams and Valentina Tereshkova. Video was about the detailed life history of Kalpana Chawla and Sunita Williams.

The game'' ESPACIO'' was conducted through google meet. It was all about identifying the hidden space travelers. Among 6 participants from our department ,2 crossed the winning criteria. Amritha Sebastian of 2nd DC Physics secured first place and Anna Antony of 2nd DC Physics secured second place.



The poster making competition '' INTO THE COSMOS'' was conducted through google form. The main theme of the competition was 'Women in space'. Relevance to the theme, originality and artistic composition was the judging criteria for the competition. The last date of entry of submission was 9th October. Out of the three participants, Adheena. V.S of 1st Dc Physics secured first place followed by Ninesha Mohan Sankar of 3rd DC psychology in the second place and the third place was secured by Sneha Suresh of 1st DC Physics.

6. INTERNATIONAL DAY OF WOMEN AND GIRLS IN SCIENCE





As part of International Day of Women and Girls in Science on 11th February 2022, Physics Association conducted Quiz competition and Poster making competition under the guidelines of Smt. Susan Mathew.

The Quiz competition was conducted in online mode through Google Forms and received a total of 50 entries. It was open from 8:00am to 8:00pm on 11 February 2022. Among the 50 participants four crossed the winning criteria. Akshaya G Ajayakumar of Commerce Department and Anu Undayan of BSc Mathematics shared first place, followed by Aneesha Jerome of Department of Home Science and Malavika M Ramesh of B. Com Taxation (SF) secured second and third places respectively.



The Poster making competition "ESPRITS CREATIFS" also conducted on online mode through Google forms. The main objective of the competition was women in space. The last date of entry of submission was 13th February 2022. Out of 2 participants one crossed the winning criteria. Aleena Joy of 1st year BA Economics secured the first place.

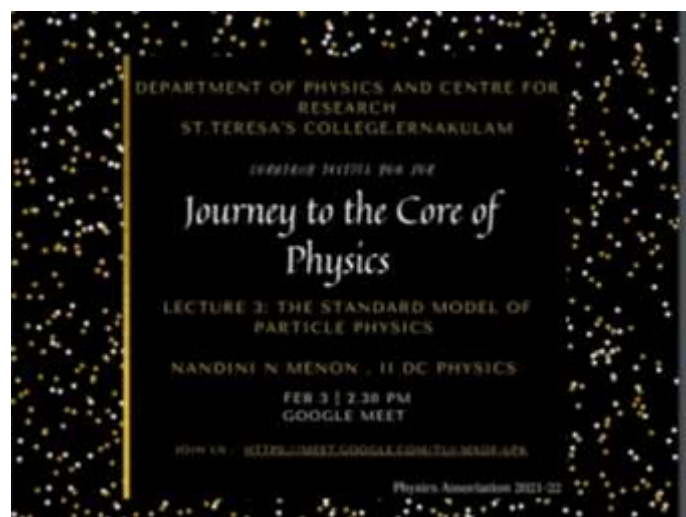
7. NATIONAL SCIENCE DAY 2021-2022



As a part of National Science day on 28th February 2022, Physics Association conducted a quiz competition under the guidelines of Smt. Susan Mathew. The quiz is based on general science in various fields and C V Raman. The competition conducted through Google form received a total of thirty entries. It closed at 11 PM on 28th February 2022. Out of the 30 students participating, Jyothi KR of II DC Physics secured the first place followed by Annie Rose of II DC Chemistry in the second place and Sreya Sonan of II DC Physics secured the third place. The quiz was coordinated by students - Manju Thomas and Swetha Sudev of II DC Physics.

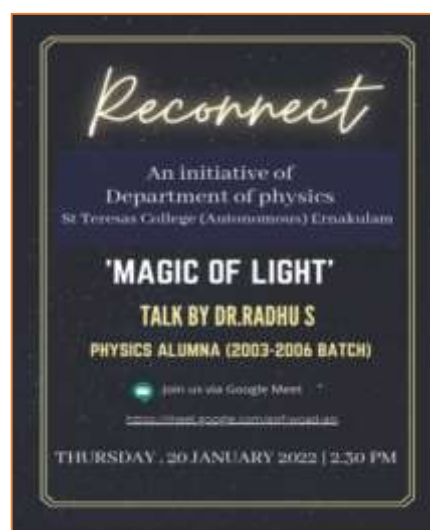
8. JOURNEY TO THE CORE OF PHYSICS

The department organises monthly seminars by students to acquaint the students about the emerging fields of Physics. It was conducted on Thursdays at 2.30pm via google meet . This is a platform for all students to present their lectures on any of the topics in Physics. Seminars were taken by students of II DC, III DC and PG students.



9. RECONNECT

Reconnect is a platform offered by the Department of Physics and Centre for Research, St. Teresa's college, for the alumnae to share their experiences, lead dialogue discussions, share insights, reflect on future challenges and to reconnect with their alma mater. Its aim is to enrich the current batch of students with the experience and expertise of alumnae. This year department has arranged two programmes via google platform on 19 November 2021 and 20 January 2022. Both the programmes enabled to rekindle the sense of community and companionship among the students along with inspiring young minds to move forward in their field of interest.



10. ANNUAL PHYSICS SYMPOSIUM

The Annual Physics symposium is a platform offered by the Department of Physics and Centre for Research, St. Teresa's college, where aspiring young researchers can present their research before students, faculty, and leading researchers of various fields from across the globe. Students get to listen and interact with eminent scholars and gain first hand knowledge of diverse Physics branches. Due to the prevailing pandemic situation the Symposium was held online. It was held on 17th and 18th March 2022. There were five invited lectures and the Keynote was given by Prof. Joby Joseph, Professor of Physics and Head, Optics & Photonic Centre, IIT Delhi.

Call for Abstracts

Abstract Submission: March 06, 2022
 Notification of acceptance: March 10, 2022
 Paper Submission: March 14, 2022

For more info, contact:
 Dr. Sanku A (Convener) 9495664078
 Ms. Merin Joby (Symposium Secretary) 8547255557
 Email: apt@stteresa.ac.in

Click to Register
<https://forms.gle/3W3111111111111111>

Kindly email your abstract to: apt@stteresa.ac.in
 Template for paper submission can be downloaded at:
<https://www.stteresa.ac.in/wordpress/wp-content/uploads/2021/03/Template-for-paper-submission-2022.pdf>

A certificate shall be provided for the best paper presentations and also to all registered participants.

Organizing committee
 Ms. Merin Joby (Symposium Secretary)
 Ms. V. U. Sreerajini Pal
 Ms. Alina P S
 Ms. Khana Varughese
 Ms. Parvathi M U

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM
 College with Potential for Excellence
 Re-accredited by NAAC with 'A++' and CGPA 4.07 in Fourth Cycle

ANNUAL PHYSICS SYMPOSIUM
 AFS 2022

17, 18 March 2022
 Platform: Google Meet

Organized by
 Department of Physics & Centre for Research

IMAGINE INVENT INSPIRE

About the Symposium

Annual Physics Symposium (AFS) started in 2006, aims at bringing both young researchers and experts working in diverse areas of Physics and interdisciplinary sciences to a single platform to discuss the current status of the art in research. It also gives an opportunity to foster a culture of innovative and creativity among the young students. The sixth & seven AFS 2022 will be held during 17-18 March 2022 via online mode. The scope of the symposium covers areas in the realm of Physics such as Nanophotonics, Optoelectronics, Bio & Nano/ Soft Materials, Theoretical Physics, Astronomy etc.

Advisory Committee

Dr. Sr. Visalakshi CSSF (Honorary)
 Dr. Lissy Mathew (President)
 Dr. Kaly M S (SGAC Co-ordinator)
 Dr. Sanku A (Convener)
 Sr. Susan Mathew (Co-convener)
 Dr. Priya Parakkal Anandhi Jose (HOD)
 Dr. Merin Joby
 Sr. Mini Paul
 Dr. Marjiam Thomas
 Dr. Anu S. Nair
 Dr. Sujana Kurian
 Dr. Sneha V C

Programme Schedule

17 March 2022	18 March 2022
08:00-09:00: Inaugural Ceremony 09:00-10:00: Register & Breakfast 10:00-11:00: Paper Presentations	08:00-09:00: Invited Talk 1 09:00-10:00: Invited Talk 2 10:00-11:00: Paper Presentations
11:00-12:00: Invited Talk 3 12:00-01:00: Lunch Break 01:00-02:00: Paper Presentations	11:00-12:00: Invited Talk 4 12:00-01:00: Lunch Break 01:00-02:00: Paper Presentations
02:00-03:00: Invited Talk 5 03:00-04:00: Paper Presentations	02:00-03:00: Invited Talk 6 03:00-04:00: Paper Presentations
04:00-05:00: Invited Talk 7 05:00-06:00: Paper Presentations	04:00-05:00: Invited Talk 8 05:00-06:00: Paper Presentations
06:00-07:00: Invited Talk 9 07:00-08:00: Paper Presentations	06:00-07:00: Invited Talk 10 07:00-08:00: Paper Presentations

Invited Lecturers:
 Prof. Joby Joseph, Professor & Head, Optics & Photonic Centre, IIT Delhi
 Prof. Sanku A, Professor & Head, Optics & Photonic Centre, IIT Delhi
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13. ACTIVITIES OF ICONNECT

Energy related extension activities of the department are coordinated under the banner of I – CONNECT. On 10th December, 2021, a team of students and teachers and staff of ICONNECT visited the Kumbalanghi Kudumbasree unit and conducted a hands-on-training for LED assembling. The LED bulbs that were assembled were distributed for free to the Kudumbasree members. It was made official that an LED clinic will be started and that ICONNECT will help with the start-up thus enabling the unit to manufacture, distribute and repair LED bulbs in the panchayat.



Also we carried out energy audit of Kumblanghi Grama Panchayat Building under SAGGY Scheme.



Student achievement

Lakshmi KV of III DC Physics completed her IASc- INSA- NASI Summer Research Fellowship 2021. She worked on a project entitled ‘Properties of globular clusters and comparison of properties of gc’s in different galaxy types’ in online mode September-October 2021.



