

DEPARTMENT OF PHYSICS: ANNUAL REPORT 2021-22

The academic year 2021-22 of the department started with the commencement of classes for the III and V semester of the BSc programme, as well as the III semester of the MSc programme and also conducted a Department meeting for the faculties to plan Departmental Activities for 2021-22. This annual report will provide an overview of the department's activities during the past year, including academic achievements, research accomplishments, and outreach efforts. This year we organized several programmes, including seminars, invited talks, exhibitions etc.

I. ACADEMIC PROGRAMS OFFERED BY THE DEPARTMENT

Sl. No.	Name of the Program	Aided/Self Financing
1	BSc Physics	Aided
2	MSc Physics	Self financing

II. STUDENT STRENGTH

Program	Year	Student Strength	Total
BSc Physics	I Year	41	122
	II Year	41	
	III Year	40	
MSc Physics	I Year	19	37
	II Year	18	
Total Students			159

III. UNIVERSITY EXAMINATION RESULTS

Program	No of Students Attended the Examination	No of Students Passed	Pass %
BSc Physics	49	30	75
MSc Physics	19	12	63

IV. FACULTY DETAILS

Sl. No.	Name of the Faculty	Designation	Qualifications	NET/JRF / GATE/ SET
1	Dr. Biju KG	Associate Professor	PhD	Nil
2	Hashim NK	Assistant Professor	MSc	NET
3	Joseph MV	Rtd. Professor	MSc	Nil
4	Neeraja Krishna	Assistant Professor	MSc	SET
5	Amaya Sivan	Assistant Professor	MSc	SET
6	Nithin Soman P	Assistant Professor	MSc	NET
7	Dr. Muhammed Sabeer N.A	Assistant Professor	PhD	JRF

V. DEPARTMENTAL ACTIVITIES

1. Workshop on mathematical modelling

Workshop on **Mathematical modelling** conducted in the department on **18/11/2021 & 19/11/2021**. The programme was conducted in association with TIFR and CUSAT with the support of KSCSTE.

Teacher Professional Development Program
Mathematical Modeling
Using technology-enabled and student-centered learning systems

Program sessions (2 days each) will be held between **18, 19 November 2021**
10-20 participants in each session

Organized by
KSCSTE, IITSCSE-TIFR, CUSAT
University of Calicut, WMO Arts and Science College

Catalyzed and supported by National Council for Science & Technology Communication, DST, Govt. of India, New Delhi

Objectives

- To introduce the process of mathematical modeling, and its extension to computational modeling, using physics disciplines
- To foster expertise in model-based reasoning and computational thinking, using new computational media and interactive simulations

Duration
A series of training programs will be conducted during September-December 2021. Each program will run for two days.

Locations
- Cochin University of Science and Technology Campus, Cochin
- University of Calicut Campus, WMO Arts and Science College, Muzhi, Wayanad

Workshop Mode
Each program will be conducted with a limited number of registered participants, strictly adhering to the state's COVID-19 regulations. If the number of applications are high, participants will be selected based on some distribution criteria (experience, location, gender). The program will be non-residential.

Participation
Interested faculty members in physics from colleges/university departments in Kerala can participate in a two-day session.

Additional Notes
Participants will receive a certificate after completion of the two-day training program.
-The organizers will have the right to modify the date of the program, based on COVID-19 regulations. Any changes will be communicated to participants by email.
-Lunch and tea will be served for all participants during the program.
-Daily allowance will be provided to participants at the end of the program.

Interested faculty members can register by scanning the QR code or visit the link below:
<https://www.pdpc2021.uic.ac.in>

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2. Invited talk by Dr. Ajith Kumar BP (Rtd. Scientist IUAC)

Dr. Ajith Kumar BP, Rtd Scientist of Inter University accelerator center, New Delhi has delivered a talk on **Python Programming** on 21st December, 2021.



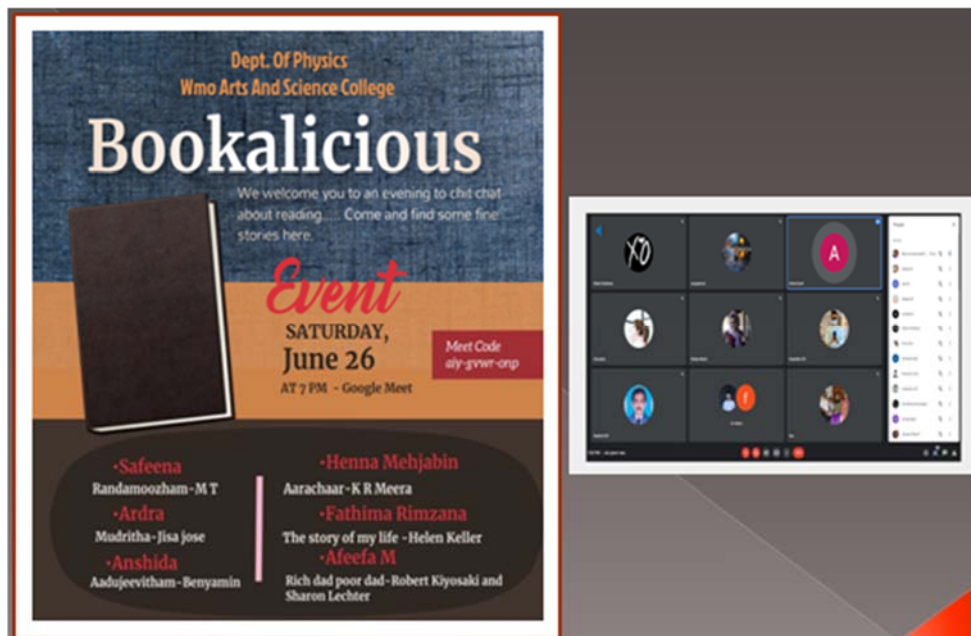
3. Space week celebration-2021

Department has celebrated space week with two online talks. **Dr. Sidharthan**, Rtd. Scientist ISRO, has delivered a talk on History of space expeditions on **08/10/2021** and **Mr. Manikandan P E**, Scientist, ISRO gave a talk on Geo Satellite operations on **09/10/2021**. Both of them were conducted through Google meet.

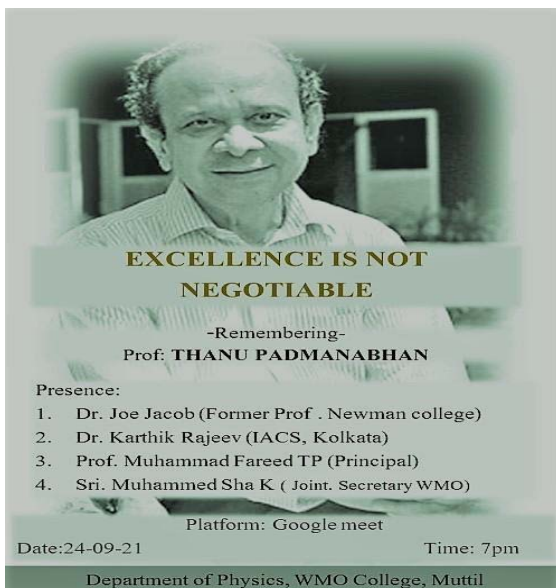


4. Reading week celebration

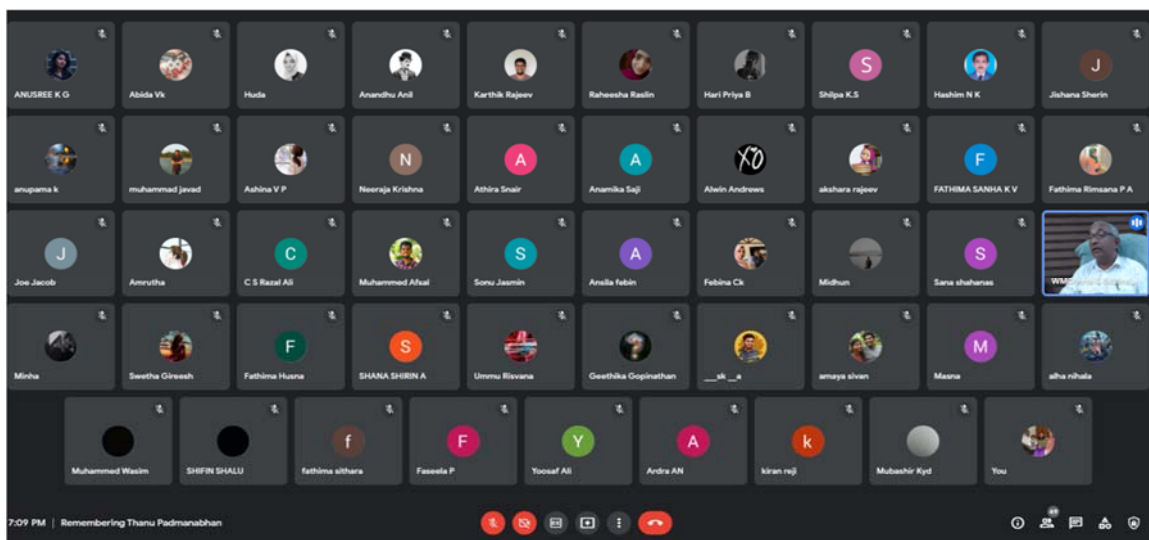
The Department organised a **Reading week** celebration on **26th June 2021**. Ardra Sunil, Anshitha Aboobacker, Fathima Rimsana, Henna Mehjabin, Anupama, Safeena A and Afeefa M shared their reading experience. It was a wonderful event conducted by the students.



5. Thanu Padmanabhan anusmaranam



Department conducted ‘Remembering of Thanu Padmanabhan’ on 24/09/2021. The resource persons were Dr. Joe Jacob, Newman college, Thodupuzha and Dr. Karthik Rajeev, IACS, Kolkata. The meeting conveyed the contributions of this great scientist to the physics community.



6. Christmas celebration

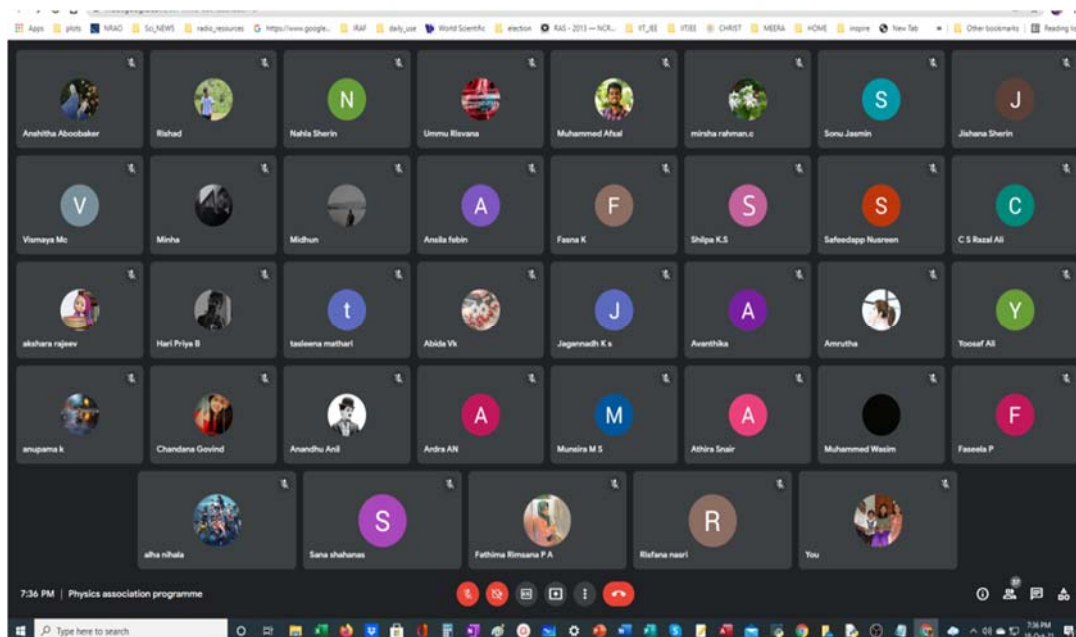
The physics association celebrated Christmas and new year by various activities and costume programs.



7. Student programmes

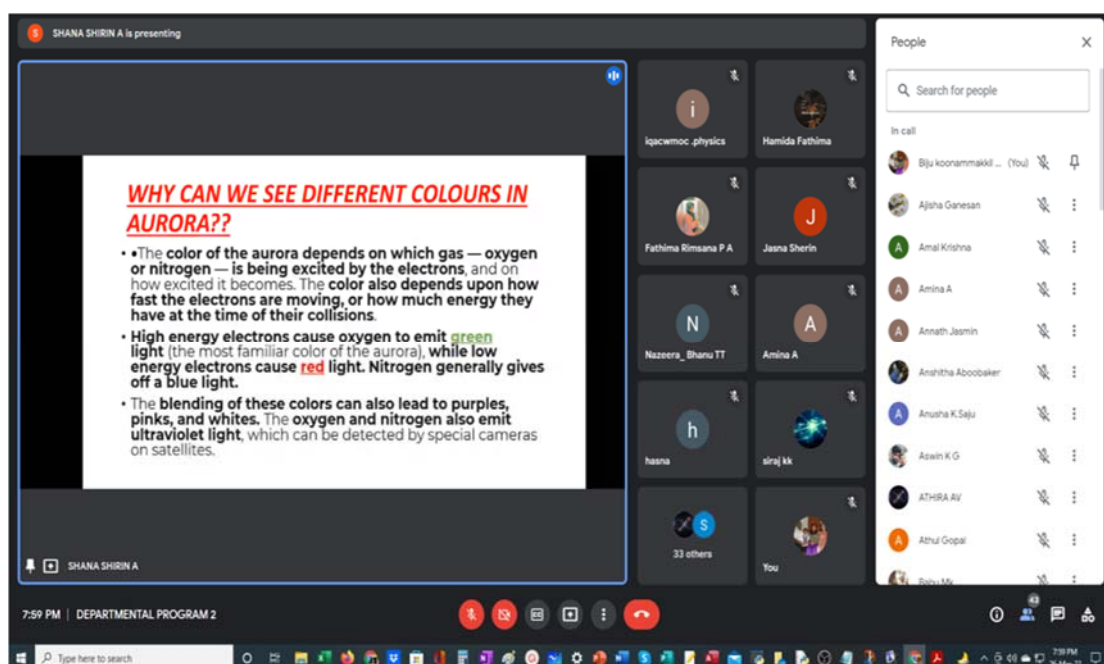
(i) Cultural programmes

The students in the department conducted online cultural programmes occasionally.



(ii) Student presentations

This programme was part of the **Student Presentation Series** organised by the Department. **Ms. Shana Shirin** presented a paper on **26/03/2022**.



8. Orientation for Ist sem UG students

An **Orientation** programme conducted for Ist Semester UG students on **20-01-2022**, by Triz learning center. It was a great experience for students.



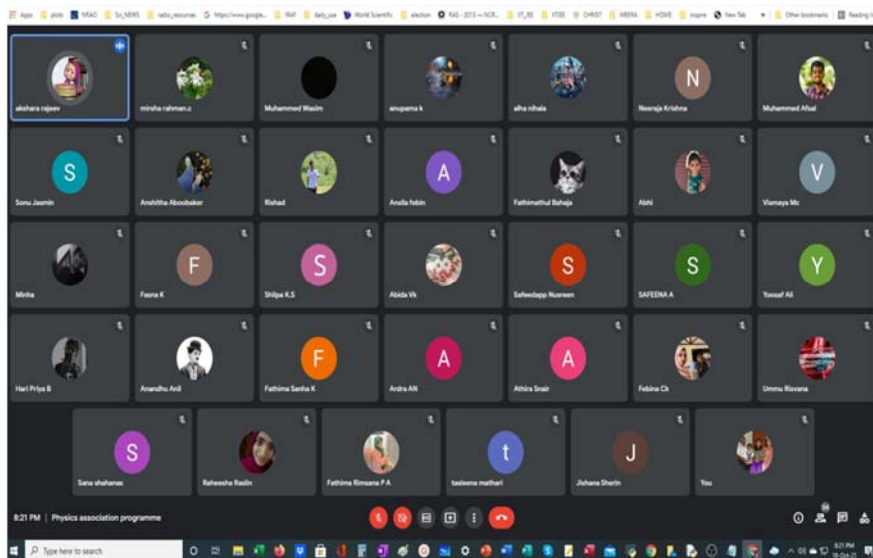
9. Study tour

The department conducted a study tour to Ernakulam and Munnar. The trip started on **16th January 2022** from the college. We visited Munnar and Idukki dam for sightseeing. After the 4 day trip the group returned home early morning on 20th January.



10. Physics association inauguration

The Inaugural function of the **Physics Association** was conducted through google meet on **18/09/2021**




11. National science day

The National Science Day 2022 was celebrated on **28/02/2022**, monday through Google Meet. **Dr. Joe Jacob**, Rtd. Prof. Newman college, Thodupuzha, has delivered a talk on '**James Webb Space Telescope**' (JWST).

DEPARTMENT OF PHYSICS
WMO Arts & Science College, Muffil

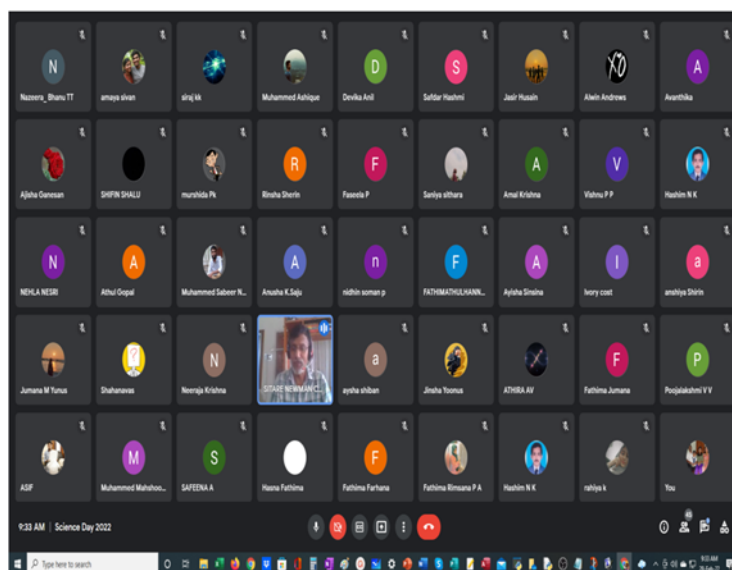
Talk on
James Web Space Telescope (JWST)

Resource Person
Dr. Joe Jacob
(Rtd. Prof. Newman College, Thodupuzha)



NATIONAL SCIENCE DAY 2022

Date: 28-02-2022; Monday
Time: 9.30 am
Platform: Google meet
<https://meet.google.com/fjn-phcq-coa>



VI. EMINENT PERSONALITIES VISITED THE COLLEGE

1. Dr. Ajith Kumar BP (Scientist Rtd, IUAC, New Delhi)
2. Dr. Mashook (TIFR, Mumbai)
3. Dr. SASIDEVAN (CUSAT)
4. Dr. Charles Jose (CUSAT)
5. Dr. Muhammed Shahin T (University of Calicut)
- 6 Mr. Muhammed Ashfas (Govt Brennen College Thalasserry)

Visited through virtual platforms

1. Mr. Manikandan PE, Scientist ISRO.
2. Dr. Sidharthan PM (Scientist ISRO, Rtd)
3. Dr. Joe Jacob (Newman College)
4. Dr. Karthik Rajeev (IACS, Kolkata)

VII. BEST PRACTICES

- The department collects used books from senior students and gives them to needy students.
- The department has arranged an honesty shop, where students will get paper, pen, pencil, rubber etc. and the money can be deposited in the box there. This is introduced to inculcate moral values like honesty and trust in the students.

VIII. BRIDGE COURSES

- A Bridge course for 1st sem complementary course conducted by Ms. Neeraja Krishna.

IX. TEACHERS ATTENDED PROGRAMMES

- Ms. Neeraja Krishna and Dr. Muhammed Sabeer N.A. have attended a workshop on mathematical modelling on 18/11/2021 & 19/11/2021. The programme was conducted in association with TIFR and CUSAT with the support of KSCSTE.