# K.A.H.M UNITY WOMEN'S COLLEGE

## PHYSICS CLUB & DEPARTMENT OF PHYSICS

## AN INTRODUCTION TO THE WORKS OF PHYSICS NOBEL LAUREATES OF 2023

# 'Attosecond Pulses'

**Aim, Objectives, and Scope of the programme:**

The aim of the talk is to explore and elucidate the significant contributions and groundbreaking research that led to the awarding of the 2023 Nobel Prize in Physics. The discussion will provide a comprehensive understanding of the laureates' work, its scientific impact, and its potential applications in various fields.

**Objectives:**

1. **Introduce the Laureates**:
   - Provide a brief background on the 2023 Nobel Prize winners in Physics, including their academic and professional journey.
2. **Explain the Awarded Research**:
   - Describe the specific research or discovery that earned the laureates the Nobel Prize.
   - Highlight the innovative aspects and methodologies used in their research.
3. **Discuss the Scientific Impact**:
   - Analyze how the laureates' work advances current knowledge in physics.
   - Illustrate the implications of their findings for future research and technological developments.
4. **Explore Practical Applications**:
   - Identify potential or existing applications of the research in various industries (e.g., technology, healthcare, energy).

- Discuss any interdisciplinary relevance and the potential to solve real-world problems.

**Scope:**

**Comprehensive Coverage**:

- The talk will cover the full spectrum of the laureates' work, from fundamental theories to experimental practices and their implications.

**Educational Impact**:

- Aim to inspire and educate attendees about the importance of scientific research and the continuous advancements in the field of physics.

By focusing on these elements, the talk will not only honor the achievements of the 2023 Physics Nobel Laureates but also foster a deeper appreciation for the ongoing contributions of physics to our understanding of the universe and the development of new technologies.

| | |
|---|---|
| Name of the Co ordinator : | Mr Sabeer V<br>Assistant Professor<br>Department of Physics |
| Date of programme | 22/02/2024 |
| Mode of the programme | Offline |
| Total no: of participants | 35 |
| Organizing body | Physics Club & Department of Physics |
| Organizing Committee members | 1. Mr.Muhammed Abdul Hakkeem C, |

Head,Dept.of Physics

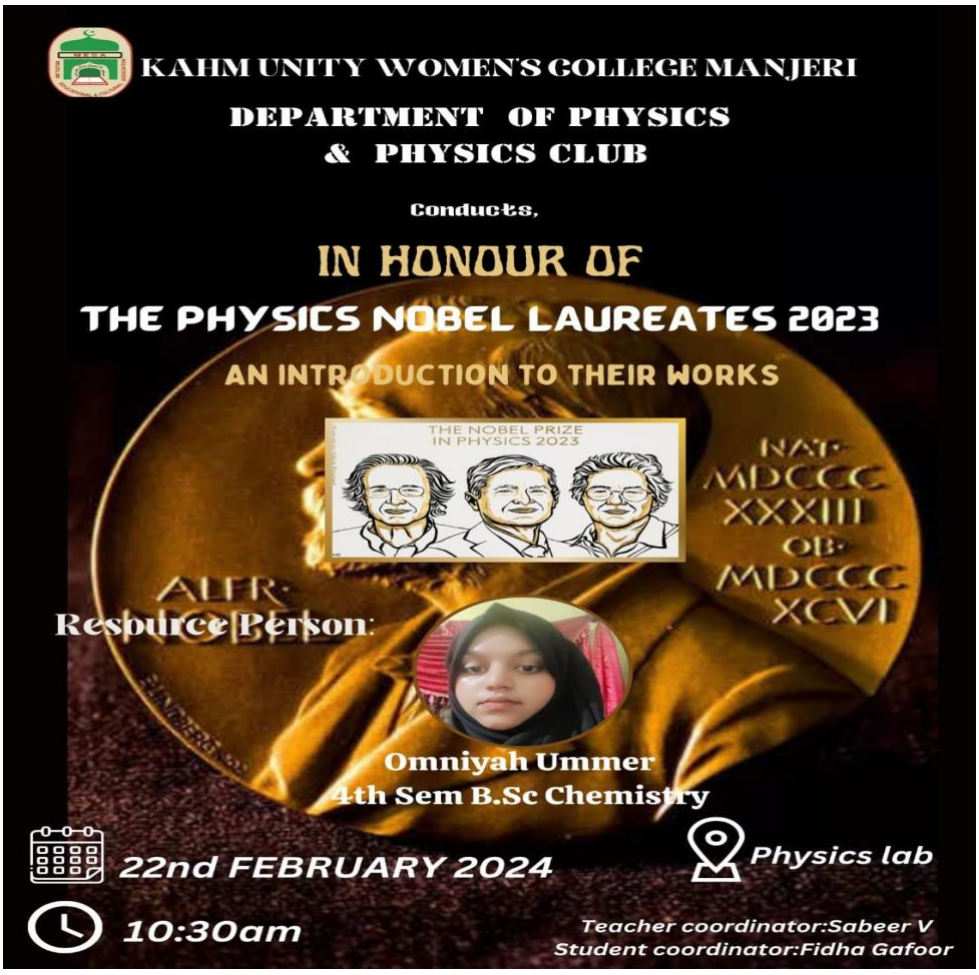
2 . Mr.Sabeer V, Coordinator,Physics Club

3. Mrs Fidha Gafoor, Student coordinator.

**Students Involvement in Organizing the programme:**

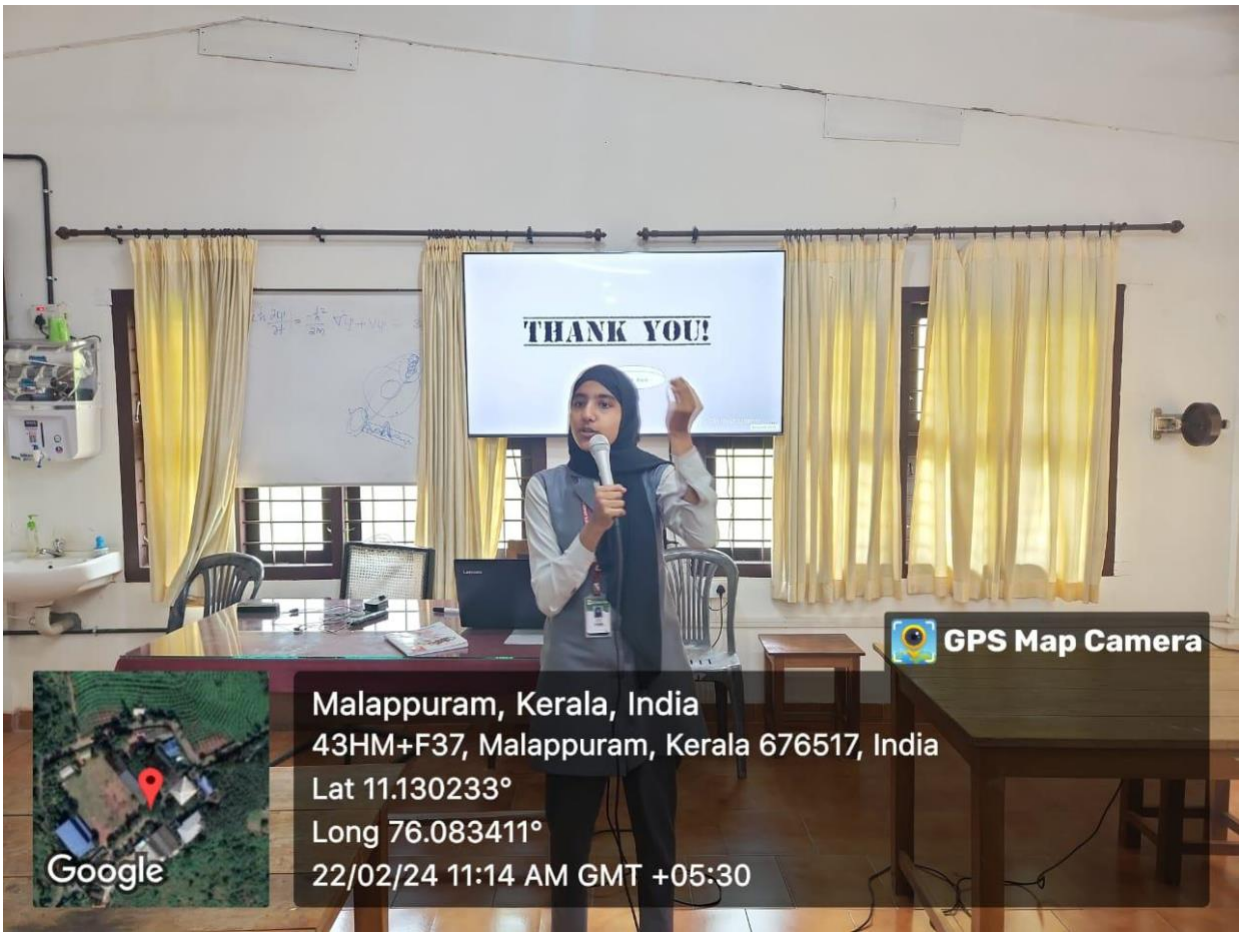
Students in the Second year Chemistry department actively involved in the programme. They designed a beautiful brochure for the programme. Moreover they arranged the Physics lab for the talk. Geotagged Photos of the programme was taken by students. Registration of participants for the programme, attendance of participants ,etc were recorded by students. Vote of thanks to resource person was delivered by Ms. Fidha Gafoor, the student coordinator for the programme.

**REPORT**


KAHM UNITY WOMEN'S COLLEGE MANJERI
DEPARTMENT OF PHYSICS
& PHYSICS CLUB
Conducts,
IN HONOUR OF
THE PHYSICS NOBEL LAUREATES 2023
AN INTRODUCTION TO THEIR WORKS
THE NOBEL PRIZE
IN PHYSICS 2023
Resource Person:
Omniyah Ummer
4th Sem B.Sc Chemistry
22nd FEBRUARY 2024
Physics lab
10:30am
Teacher coordinator:Sabeer V
Student coordinator:Fidha Gafoor


WHAT IS THE NOBEL PRIZE?


GPS Map Camera
Malappuram, Kerala, India
43HM+F37, Malappuram, Kerala 676517, India
Lat 11.130184°
Long 76.08338°
22/02/24 10:46 AM GMT +05:30
Google


THANK YOU!
GPS Map Camera
Malappuram, Kerala, India
43HM+F37, Malappuram, Kerala 676517, India
Lat 11.130233°
Long 76.083411°
22/02/24 11:14 AM GMT +05:30
Google

**Report**:

The talk began with a brief introduction to the laureates, highlighting their academic and professional backgrounds. The speaker provided insights into their career journeys, significant milestones, and prior contributions to the field of physics. The speaker delved into the specifics of the research that led to the Nobel Prize. The laureates were recognized for their pioneering work in experimental methods that generate attosecond pulses of light for the study of electron dynamics in matter, which involved with light capture the shortest of moments.The innovative aspects of their work were highlighted, demonstrating how their methodologies and approaches differed from previous research in the field. The speaker discussed the broader implications of the laureates' findings. The talk emphasized how their research has advanced our understanding of attosecond pulses and opened new avenues for future studies. The significance of their work in contributing to the theoretical and experimental foundations of physics was underscored. By celebrating and disseminating the achievements of Nobel Laureates, we can inspire the next generation of scientists and contribute to the ongoing pursuit of knowledge and innovation.

# Participants:

| SI No: | Name of student | Programme/Subject | Signature |
|---|---|---|---|
| 1 | Adeeba ca | III Sem B.Sc Chemistry | |
| 2 | Nida Abdul Razak | III Sem B.Sc Chemistry | |
| 3 | Hiba chatholi | III Sem B.Sc Chemistry | |
| 4 | Amla kalangottil | III Sem B.Sc Chemistry | |
| 5 | Mubeena AM | III Sem B.Sc Chemistry | |
| 6 | Fathima Anooda CK | III Sem B.Sc Chemistry | |
| 7 | Numa nasrin vp | III Sem B.Sc Chemistry | |
| 8 | Hanna | III Sem B.Sc Chemistry | |
| 9 | RINSHA K | III Sem B.Sc Chemistry | |
| 10 | Fathima Jasni | III Sem B.Sc Chemistry | |
| 11 | Irfana nk | III Sem B.Sc Chemistry | |
| 12 | Baby shamla | III Sem B.Sc Chemistry | |
| 13 | HASNA NUSRY PN | III Sem B.Sc Chemistry | |
| 14 | SAFNA MUBASHIRA P | III Sem B.Sc Chemistry | |
| 15 | Dilsha K | III Sem B.Sc Chemistry | |
| 16 | Fahmida Farhath. P | III Sem B.Sc Chemistry | |
| 17 | Sahla k | III Sem B.Sc Chemistry | |
| 18 | Fathima hiba. B | III Sem B.Sc Chemistry | |
| 19 | Shakira jumana | III Sem B.Sc Chemistry | |
| 20 | Muhsina c | III Sem B.Sc Chemistry | |
| 21 | Safnamozhikkal | III Sem B.Sc Chemistry | |
| 22 | Kadeeja Sulfana.K | III Sem B.Sc Chemistry | |
| 23 | Fathima Liyana KT | III Sem B.Sc Chemistry | |
| 24 | Fathima Fidha KP | III Sem B.Sc Chemistry | |
| 25 | RAISHADA M | III Sem B.Sc Chemistry | |
| 26 | Afna Rimzi KT | III Sem B.Sc Chemistry | |
| 27 | Fidha M | III Sem B.Sc Chemistry | |
| 28 | Hanna Jasmin | III Sem B.Sc Chemistry | |
| 29 | Shahana sherin T | III Sem B.Sc Chemistry | |
| 30 | Fathima minha. C | III Sem B.Sc Chemistry | |

| | | | |
|---|---|---|---|
| 31 | FIDHA NASHMA TP | III Sem B.Sc Chemistry | |
| 32 | Fathima Mirshana TP | III Sem B.Sc Chemistry | |

**Feedback of the programme:**

After completion of the programme feedback of students were collected through google form and analysed.

| Name of participant | How satisfied were you with the talk | The talk was very much relevant and helpful | Did the talk meet your expectations? | Would you say the talk was interactive? | Did the talk help you with new learnings or knowledge? | Would you say the resource person were knowledgeable? | How satisfied were you with the Topic? | How satisfied were you with the Presentation Style? |
|---|---|---|---|---|---|---|---|---|
| ANSHIDA FARHA K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| ASHIKAMOL K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| ASNA NT | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| AYISHA MINNA M | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| FANSHA.K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| FARHA SALEEM C H | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| FATHIMA AJEESHA P | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| FATHIMA BINSHIDA T P | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FATHIMA DILSHA U | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| FATHIMA MIDHA K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| NASNA N | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| NIDHA JABIN CP | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| NIYA FATHIMA PM | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| NOURIN CK | Satisfied | Agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| NUEMA ANEES K | Very Satisfied | Agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| OMNIYAH | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| RANIYA AK | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| RISLA FATHIMA N | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| ROSHIN K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SAHADIYA K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| SHAHADIYA T | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SHAHAMATHU SHAHANA N | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SHAHANA K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SHIFLA NANAKKAL | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| THANSHEEHA. K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SHARMINA THASNI P | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SHILNA NIHALA E | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| APARNA AP | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| DILFA. K | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| FIDHA GAFOOR P | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| PARVATHY T | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| RINSHA | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Very satisfied | Very Satisfied |
| SHAJERIN CK | Very Satisfied | Strongly agree | Yes | Yes | Yes | Yes | Satisfied | Satisfied |
| SHAMILA ck | | | | | | | | |

**Feedback analysis**

Feedback of participants proved that the programme was very useful, effective and informative.

**Outcome,Evaluation and Results of the Programme**

The talk on the works of the 2023 Nobel Laureates in Physics provided an in-depth understanding of their groundbreaking contributions and the implications of their research. The talk could inspire students by highlighting the innovative and impactful work of the laureates. Complex scientific concepts were explained in an accessible manner, ensuring that students in undergraduate level could grasp the key points. The talk included interactive segments such as Q&A sessions, which allowed the audience to engage directly with the speaker.Visual aids, such as diagrams and videos, were utilized to illustrate the laureates' work, enhancing comprehension and retention. Attendees gained a clearer understanding of the 2023 Nobel Prize-winning research, including its background, development, and potential future impact.The talk highlighted the collaborative nature of scientific research, emphasizing the importance of interdisciplinary work. Overall, the talk on the works of the 2023 Nobel Laureates in Physics was a resounding success, achieving its goals of education, inspiration, and engagement. The positive response from the audience underscores the importance of such events in promoting scientific literacy and encouraging the next generation of physicists.

14.Signature of the organizing secretary