# **DEPARTMENT OF PHYSICS**

# Activities 2023-24

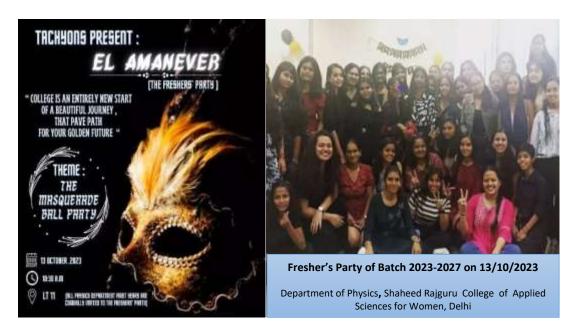
# **Index**

S.No.	Name of the Event	Date	Page no.
1.	EL AMANEVER: Fresher Party of	October 13, 2023	2
	Batch 2023-2027		
2.	Technical fest: TRAP'23	November 6-8, 2023	2-4
3.	FUSOMANIA: Cultural Dance	November 9, 2023	5
	Competition		
4.	Seminar (Unveiling Advancement in	February 7-8, 2024	6-9
	Physics)		
5.	Intra-College March Past Competition	February14-15, 2024	10
	2024		
6.	Visit to IUAC	March 28, 2024	11
7.	CONFLUENCE'24: Alumni meet	April 15, 2024	12-13
8.	AU REVOIR: Farewell Party of Batch	April 24, 2024	13
	2021-2024		

### 1. EL AMANEVER: Fresher's Party of Batch 2023-2027

The Department of Physics organized **EL AMANEVER: Fresher's Party** for the batch of 2023-2026 on the 13th of October 2023, with a masquerade ball theme. The event was held to help students get acquainted with the department and encourage interaction and learning.

### • Number of Participants: 70



#### 2. Technical Fest: TRAP-23

The Department of Physics organized its technical fest, **TRAP-23**, on the 6th, 7th, and 8th of November 2023, in collaboration with the Departments of Chemistry, Mathematics, and Statistics. A total of four events were conducted, two of which were joint events with the other three departments.

### **EVENTS ON NOVEMBER 6, 2023:**

- **SPEAKER SESSION** A speaker session was conducted by Ms. Aashna Chaudhary, an IPS officer. The session was filled with methods and techniques to stay motivated and deliver our best performance. It helped clarify students' visions for the future, especially regarding the UPSC exams.
  - Number of Participants: 250
  - **Resource person:** Ms. Aashna Chaudhary (IPS, UPSC-CSE)

• **AMONG US** – This was a joint event, described as more of a fun game. Participants formed teams of "intruders" and "players." Certain tasks were assigned, and the goal was to complete them without being eliminated by the intruders. The player who successfully completed their task without being "killed" by an intruder won the game.

• Number of participants: 120



### **EVENT ON NOVEMBER 7, 2023:**

- **SCIENCE JEOPARDY** This was a fun game with a twist of riddles and dumb charades, conducted in two rounds.
  - Round 1: Students were given riddles and had to act out the clues to guess which scientific phenomenon was being described.
  - **Round 2:** The riddles were related to the names of scientists and scientific phenomena.
  - Number of participants: 48

## **EVENT ON NOVEMBER 8, 2023:**

- **VOICE OF BRAINS** A debate competition with two topics:
  - 1. **Artificial Intelligence vs. Human Intelligence:** Students debated the advantages and limitations of AI compared to human cognitive abilities.
  - Modern Physics vs. Classical Physics: Participants discussed the relevance of classical physics foundations versus the revolutionary impact of modern physics discoveries.
  - Number of participants: 62





TRAP: Technical Fest held on 6-8<sup>th</sup> November 2023, Shaheed Rajguru College of Applied Sciences for Women, Delhi

## 3. FUSIOMANIA: Cultural Dance Competition

The Department of Physics participated in FUSOMANIA, a cultural dance competition organized during **UJJWAL 23: Diwali Mela** at Shaheed Rajguru College of Applied Sciences for Women on November 9th. The dance performed by the team was Garhwali (Pahadi Dance), showcasing the rich cultural heritage of the Garhwal region.

# • Number of Participants: 05



### 4. Seminar on "UNEVILING ADVANCEMENTS IN PHYSICS"



**Day 1: 7 FEBRUARY, 2024** 

The two-day seminar, "Unveiling Advancements in Physics," commenced on the 7th of February with a traditional lamp-lighting ceremony, marking the start of an event filled with thought-provoking and engaging lectures.

### Day 1 Highlights:

- Prof. (Dr.) Nand Lal Singh: Prof. Singh delivered an insightful talk titled "Milestones in the Development of Nuclear Physics: A Journey through the Wonderful World of Proton and Neutron." His presentation provided a detailed overview of key advancements in nuclear physics, tracing the evolution of the field from its origins to modern discoveries.
- Number of Participants: 62
- **Resource Person:** Prof. (Dr.) Nand Lal Singh (Professor Emeritus, NSUT)

> Dr. Jyoti Shah: Dr. Shah's presentation, "Hydroelectric Cell: A Miraculous Self-Sustainable Green Energy Source of the Era," was nothing short of inspiring. Her discussion on the potential of hydroelectric cells as a revolutionary green energy source sparked enthusiasm among students. Her talk resonated with the students, motivating them to consider careers in cutting-edge renewable energy research.

• Number of Participants: 62

• **Resource Person:** Dr. Jyoti Shah (DST-Women Scientist, CSIR-NPL)

> Mr. V. V. Satyanarayana: Mr. Satyanarayana conducted an interactive session titled "Innovation Experiments using ExpEYES," where he demonstrated a series of physics experiments using the ExpEYES platform. This hands-on session actively engaged students, allowing them to explore the practical applications of physics through real-time experiments. The session provided a valuable learning experience, encouraging participants to think critically and creatively about physics experimentation.

• Number of Participants: 62

• **Resource Person:** Mr. V. V. V. Satyanarayana (Engineer, IUAC, Delhi)

Prof. (Dr.) Supriya Kar (University of Delhi): The day concluded with a riveting lecture by Prof. Kar, titled "Aspects of Quantum Black Holes and the Nobel Prize in 2020 Physics." His talk delved into the fascinating world of quantum black holes, a topic that has captured the imaginations of both researchers and the general public. He also provided insights into the discoveries that earned the 2020 Nobel Prize in Physics, offering students a glimpse into the cutting-edge research that is reshaping our understanding of the universe. Prof. Kar's ability to explain complex quantum concepts in an accessible way left the audience thoroughly captivated and eager for more.

• Number of Participants: 62

• **Resource Person:** Prof. (Dr.) Supriya Kar (Professor, Department of Physics and Astrophysics, University of Delhi).

Day 1 of the seminar was filled with inspiring and intellectually stimulating sessions, setting a high standard for the following day.



**Day 2: February 8, 2024** 

Day 2 began with a lamp-lighting ceremony, followed by a series of thought-provoking lectures:

- ➤ Dr. Pawan Kulriya: Dr. Kulriya's talk on "Materials Challenges in Advanced Nuclear Energy Systems" provided valuable insights into the complexities and advancements in this critical field.
  - Number of Participants: 62
  - Resource Person: Dr. Pawan Kulriya (Associate Professor, SPS, JNU, New Delhi)
- ➤ Prof. (Dr.) Bhanu Pratap Singh: Professor Singh delivered an engaging lecture on "Carbon Nanotubes: Synthesis and Their Emerging Applications," showcasing real-world applications of these fascinating materials through demonstrations of samples made from carbon nanotubes.
  - Number of Participants: 62
  - **Resource Person:** Prof. (Dr.) Bhanu Pratap Singh (Senior Principle Scientist and Deputy Head, CSIR-NPL, Delhi).

The seminar concluded with an exciting quiz, allowing students to test their knowledge and solidify their understanding of the diverse topics covered over the two days.

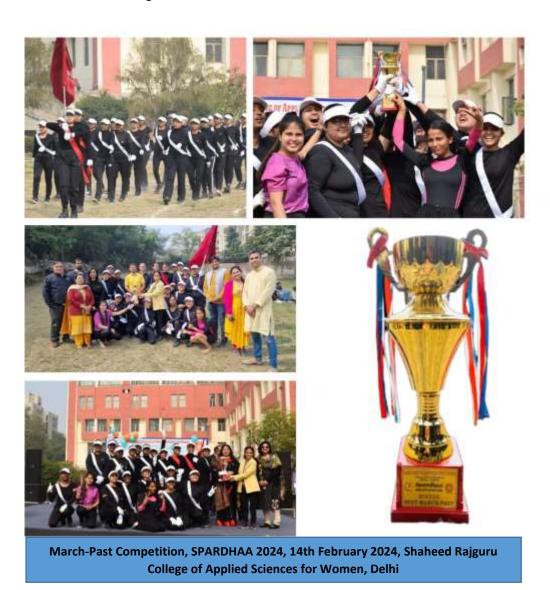


Day 2: Seminar on "UNEVILING ADVANCEMENTS IN PHYSICS", 8<sup>th</sup> February 2024, SR-1, Shaheed Rajguru College of Applied Sciences for Women, Delhi

### 5. Intra-College March Past Competition 2024: Winner

As part of the **Annual Sports Fest: SPARDHAA 2024** held on **14th and 15th February 2024**, the college organized an **Intra-College March Past Competition** that brought together students from various departments to showcase their discipline, unity, and team spirit. This grand event was a highlight of the fest, capturing the essence of teamwork, synchronization, and dedication. The **Department of Physics** secured the **1**st **prize** in the competition with their impeccable display of discipline and teamwork.

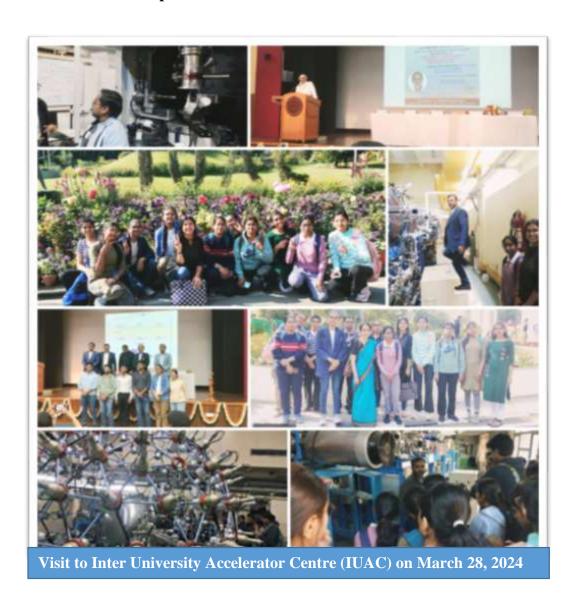
## • Number of Participants: 20



### 6. Visit to IUAC

A one-day visit to the **Inter University Accelerator Centre (IUAC)**, located on Aruna Asaf Ali Marg in Delhi, was organized on March 28, 2024. First-year students, accompanied by their teachers, participated in the visit to gain insight into the importance of nuclear sciences in the modern world. During the visit, students learned about various scientific instruments, particularly particle accelerators, and their functions through presentations and demonstrations by the scientists at the Centre. This hands-on experience helped students understand the practical applications of nuclear science and its significance in advancing technology and research.

### • Number of Participants: 13

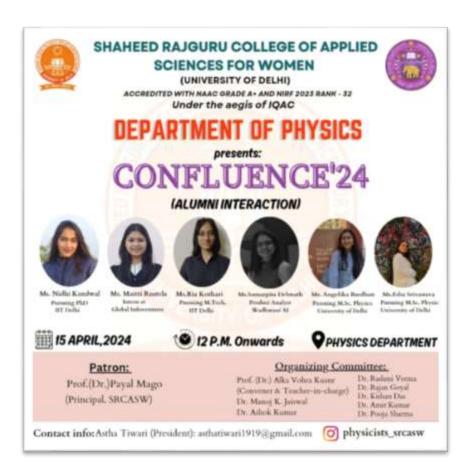


11

### 7. CONFLUENCE'24: Alumni Interaction

The Department of Physics organized CONFLUENCE'24: Alumni Interaction on April 15, 2024, a special event designed to foster engagement between current students and the department's alumni. This initiative was created to provide students with an invaluable opportunity to gain insights and inspiration from their seniors, who have already walked the path they are now embarking on. The event aimed to create a bridge between the academic and professional worlds, allowing students to connect with individuals who had once been in their shoes and have since achieved success in various fields. Through interactive sessions, students could ask questions, seek advice, and learn from the personal and professional journeys of the alumni, including their challenges, achievements, and the key decisions that shaped their careers.

- Number of participants: 54
- Resource Person: Ms. Nidhi Kandwal (Pursuing PhD, IIT Delhi), Ms. Maitri Rautela (Intern at Global Infoventures), Ms. Ria Kothari (Pursuing M.Tech. at IIT Delhi), Ms. Samarpita Debnath (Product Analyst), Ms. Angelika Bardhan (Pursuing M.Sc. at University of Delhi), Esha Srivastava (Pursuing M.Sc. at University of Delhi).





## 8. AU REVOIR: Farewell Party of the Batch 2021-2024

The Department of Physics organized **AU REVOIR**, a heartfelt farewell party for the Batch of 2021-2024, on April 24<sup>th</sup> 2024. The event commemorated their journey within the department and celebrated their academic achievements. The farewell party provided a platform for students to reflect on the memorable moments shared during their time in the department.

## **Number of Participants: 50**

