



Dr. AMBEDKAR COLLEGE, DEEKSHABHOOMI, NAGPUR
Department of Physics

Science Infotainment Program

Name of Program : Science Infotainment Program
Date of Program : 25th september 2024
Number of Participants : 150
Hosted by : Dept. of Physics
Resource Person : Ms. Arpita Rajput, B. Sc. 2nd year, Ms. Pranjal Ganer
B. Sc. 2nd year

Notice

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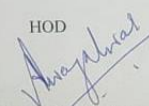
Science Infotainment Program

Notice

All the students and staff members of Physics Department (Teaching, Non-teaching, Adhoc, Contributory) are hereby informed that the Department of Physics is organizing **Science Infotainment Program** on Wednesday, 25 September, 2024 at 12.30 pm, in the college auditorium.

All the students and staff members must be **COMPULSARILY** present for the program.

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Dr. A. N. Wazalwar
Head & Professor,
Dept. of Physics
Dr. Ambedkar College,
Deekshabhoomi,
NAGPUR



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Objectives:

1. To inspire enthusiasm for physics
2. To appraise the physics Learning with Real-World Relevance
3. To enhance conceptual understanding
4. To Foster Critical Thinking and Problem-Solving Skills

Introduction: Arpita Rajput from 2nd year presented the amazing facts. She highlighted three intriguing facts that showcase the wonders and complexities of the universe. Pranjal Ganer from 2nd year presented recent inventions. She highlighted five significant inventions that have the potential to revolutionize various technological applications.

- **Amazing Facts:** There are many amazing things happening around the world. Arpita covered three of the amazing facts that can blow our mind. At first she explained about gravitational lensing that is light can bend due to the gravitational pull of massive objects like stars or black holes. This occurs when light passes near such objects, curving around them. Next fact is about time dilation. Time moves slower for objects traveling at high speeds. This concept, rooted in Einstein's theory of relativity, means that astronauts on the International Space Station age slightly slower than people on Earth. Last fact is about saliva and taste. Saliva is essential for tasting food. Without saliva, our taste buds would be unable to detect flavors like salty, sweet, and bitter.



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- **Recent Inventions:**



The most five recent inventions explained by Pranjal so well. First invention is about one-Dimensional Gas from Light. Physicists successfully created a one-dimensional gas out of light on 6th September 2024. This breakthrough enabled theoretical predictions about the transition into this exotic state of matter for the first time. An international experiment is expected to validate a superconductivity theory on 23rd August 2024. The experiment will demonstrate the wave-like distribution of Cooper pairs in kagome metal, potentially leading to new technological applications. Chinese scientists developed an electromagnetic vortex cannon on 10th September 2024. This technology can emit vortex rings both in air and electromagnetic waves, offering potential applications in communication, sensing, and data processing. A new experiment discovered a loophole in the fundamental rule of physics on 25th March 2024 that like charges attract. The "electrosolvation force" was found to cause oppositely charged objects to repel. Physicists observed ultracold atoms in an "edge state" where they flow along a boundary without resistance. This discovery could lead to methods for manipulating electrons to flow without friction.

Conclusion: Arpita Rajput's presentation provided a glimpse into the fascinating world of physics. She effectively conveyed the awe-inspiring nature of the



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universe and the intricate laws that govern it. Her presentation inspired the audience to appreciate the wonders of science and the endless possibilities for exploration. Pranjali Ganer's presentation provided an insightful overview of recent advancements in physics. These inventions have the potential to significantly impact various fields, including electronics, communication, and materials science.

Expected Outcomes: After the event students

1. Increased Interest and Engagement in Physics
2. Enhanced Understanding of Core Physics Concepts
3. Increased Curiosity and Desire for Research