



DCT's Dhempe College of Arts & Science

Miramar, Panaji, Goa

Report of the talk on 'Relativity' held on 17th October 2025

Department of Physics organised talk on '**Relativity**' on 17th October 2025 by

Objective

- The main objective of the talk was to understand the basic ideas of Relativity and Gravitation, and how Einstein developed the Special and General Theories of Relativity to explain concepts like time dilation, bending of light, and the motion of planets.
- The talk aimed to help students connect scientific observations with the theories that changed our understanding of space, time, and gravity.

Participants: 20 students + 5 Faculty = 25

Proceedings:

The Department of Physics under DBT Star College organized an informative and inspiring talk on 'Relativity', delivered by Dr. Santosh Kumar Das and Dr. Satyabrata Mahapatra, faculty from IIT Goa. The session focused on the transition from the Special Theory of Relativity to the General Theory of Relativity and its importance in modern physics. Dr. Das began by explaining the Twin Paradox, which shows how time slows down for a person traveling at very high speed. He illustrated how one twin, after traveling in a fast-moving spaceship, would be younger than the twin who stayed on Earth. This simple example helped in understanding the concept of time dilation. He then discussed why Einstein proposed the Special Theory of Relativity. Classical Newtonian mechanics could not explain the constancy of the speed of light, as observed in the Michelson–Morley experiment. Dr. Das also explained the limitations of the Special Theory of Relativity, which cannot deal with accelerated motion or the effect of gravity.

Dr. Satyabrata Mahapatra spoke on Equivalence principle and general theory of relativity. Einstein extended his Special Theory of Relativity, which dealt with uniform motion, to include accelerated motion and gravitational fields. Dr. Mahapatra explained how this theory could explain phenomena that Newton's laws could not — such as the precession of Mercury's orbit, and the bending of light around massive objects. The talk gave students a clear idea of how modern physics evolved from classical ideas and how Einstein's insights changed our understanding of the universe. The session ended with an interactive discussion where students asked interesting questions about black holes, gravitational waves, and the curvature of space-time.

The event was graced by Prof. P. S. Ramu Murthy, Vice Principal and Head of the Department of Physics, Dr. Swati Pawar, who coordinated the event along with faculty members Dr. Miskil Naik, Ms. Siddhi Parsekar, and Dr. Kapil Salkar.

Outcome

The talk enabled students to gain a deeper understanding of Einstein's ideas on relativity, especially the Equivalence Principle and its role in the General Theory of Relativity.



DCT's DHEMPE COLLEGE OF ARTS AND SCIENCE
Miramar, Panaji-Goa

Event: Seminar on 'Theory of Relativity'
Date/day: 17/10/2025, Friday
Venue: SV Hall
Time: 11am - 1:00pm

Attendees:
a) No. of Students: 20
b) No. of Faculty: 4

Sr.No	Roll No.	Name of the Student /Faculty	Class	Subject	Sign.
1	2406170	Shreelalita-G.Bhatmanigali	SVBSc	Physics	[Signature]
2	2406166	Agnelia-R.Fernandes	SVBSc	Physics	[Signature]
3	2406187	Shreyas Pednekar	SVBSc	Physics	[Signature]
4	2406111	Eushtita Phape	SVBSc	Physics	[Signature]
5	2302148	Gjaswi Durbhatkar	TVBSc	Physics	[Signature]
6	2302055	Prachi Chopdenkar	TVBSc	Physics	[Signature]
7	2302047	Chaitra-V.Kamble	TVBSc	Physics	[Signature]
8	2302156	Sumukh Y.Kanet	"	"	[Signature]
9	2302077	Sonal Rane	"	"	[Signature]
10	2302149	Onkar Dhuri	"	"	[Signature]
11	2302069	Gayatri Sabadekar	"	"	[Signature]
12	2506239	Shamvak Chari	TVBSc	Chemistry	[Signature]
13	2406154	Harsh Ghade	SVBSc	Physics	[Signature]
14	2406110	SUNESH-S.GOVEKAR	SVBSc	Physics	[Signature]
15	2406171	Shreenivas Lotlikar	SVBSc	Physics	[Signature]
16	2302146	Abhishek Verma	TVBSc	Physics	[Signature]
17	2302152	Ravi Raj	"	"	[Signature]
18	2302070	Hemish	"	"	[Signature]
19	2302190	Rishab Sawant	"	"	[Signature]
20	2406172	SHRUTI PANCHAL	SVBSc	PHYSICS	[Signature]
21		Dr. Kapil Salkar	Faculty	"	[Signature]
22		Ms. Siddhi Parsekar	Faculty	"	[Signature]
23		Miskil Nank	Faculty	"	[Signature]
24		Dr. Swati Pawar	Faculty	"	[Signature]

Forwarded
17/10/25

Dr. Swati Pawar
H.O.D., Department of Physics