

MAHARAJA MANINDRA CHANDRA COLLEGE

# DEPARTMENTAL SEMINAR ON 'Physics and Beyond'

## ORGANISED BY THE DEPARTMENT OF PHYSICS

22/09/2022

Date: 20/09/2022.

Jo, Jhe Principal / T.I.C., M.M.C. College, Kol - 003.

> Sub: Permission to use room no. 28 for students' seminar on 22/09/2022 (Thursday) from 1:00 pm to 4:45 pm.

Sir / Madam,

This is to humbly inform you that the 3rd and the 5th semester students of the Department of Physics are planning to average for a seminar on 22/09/2022 (Thursday) from 1:00 pm to 4:45 pm. In this regard they are in need of a classroom with a seating capacity of about 70 people, having a microphone speakers, a projector and a whiteboard or whitescreen facility, on the said date and time.

In these circumstances, as the Head of the department of Physics, I request you to kindly grant your permission to our students to conduct the said seminar & to allot room no. 28 of our college on the above date and time. I also request you to kindly allow own students to you use the college projector on the same day and time, so that they can successfully conduct the seminar.

Thanking you, faithfuly yours Sunetra Das. (Head of the dept., Dept. of Physics).

## DEPARTMENT OF PHYSICS Maharaja Manindra Chandra College

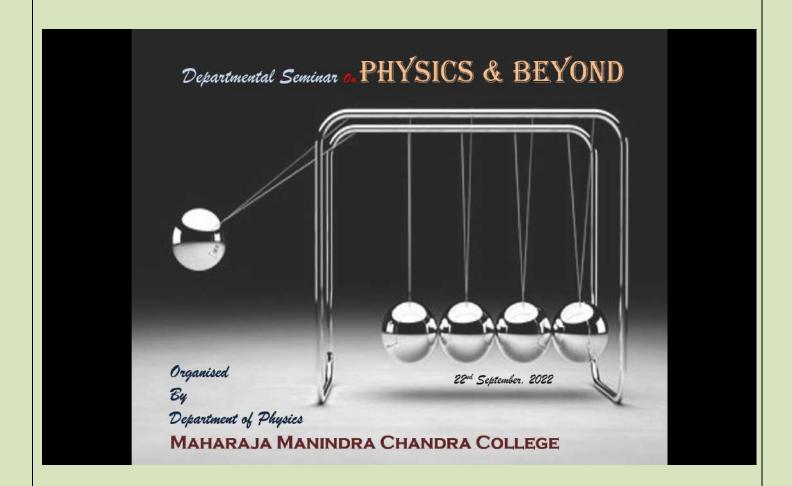
### NOTICE

This is to notify that a seminar has been arranged by the department of Physics on 22/09/2022 from 1:00 pm to 4:45 pm in room no. 28.

In this regard the physics classes, both honous and general, will remain suspended on the above date from 12:30 pm.

Das-21/09/2022. Sunetra Das

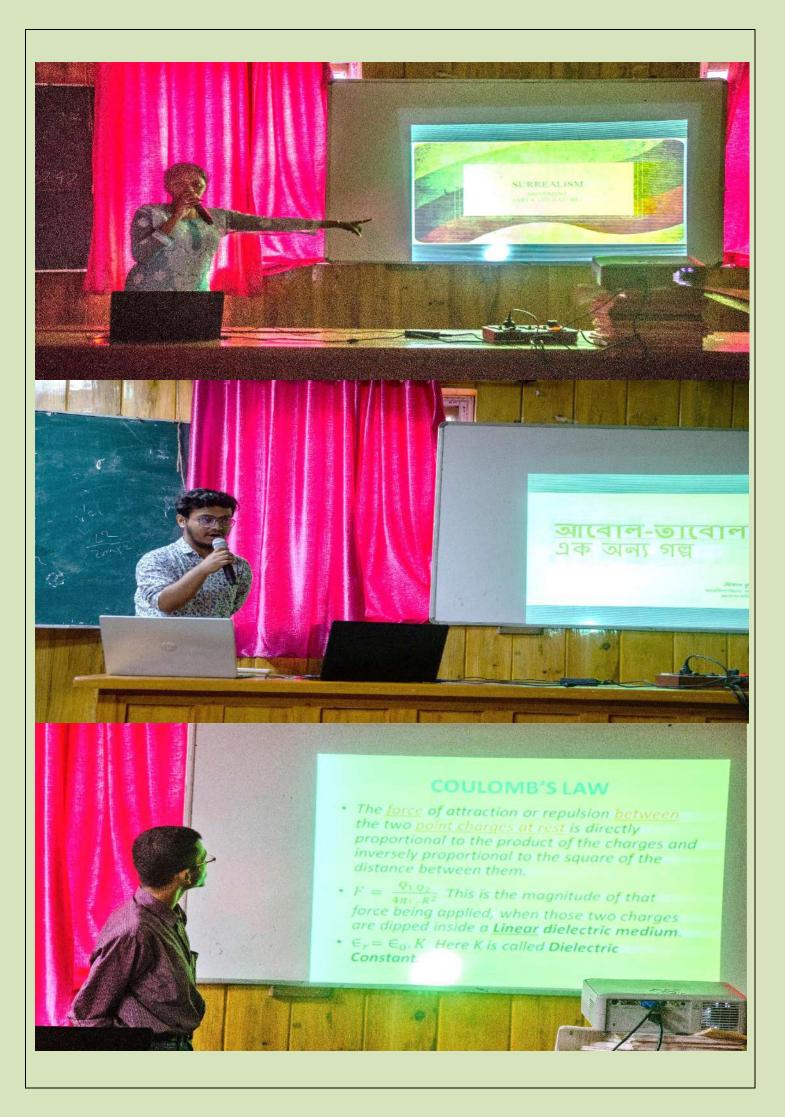
Head of the department, Department of Physics.



TIME	NAME	TITLE	TIME	NAME	TITLE
12.30 PM	Ankit Saha Swarnali Das	Wall Magazine	2.40 PM	Tannishtha Mazumdar	Food map of Kolkata
1.00 PM	Prof. Hurmal Saren		3.00 PM	Pathikrit Paul	Central force of motion
1.20 PM	Anurag Chatterjee	Vedanta Darsan and literature of Vedanta	3.20 PM	Bishan Kumar Brahma	Abol-tabol:a different story
1.40 PM	Krishanu Ghosh	Magic number theory	3.40 PM	Saptadip Chakrabarty	Misconception of Coulomb's law
2.00 PM	Neha Chandra	Surrealism Mobvement	4.00 PM	Arabinda Malakar	Grab skill, earn money and invest it
2.20 PM	Adil Zahidi	Future of fusion energy	4.20 PM	Prof. Shyamal Mondal	Understanding photography from different perspective













#### Departmental Seminar on 'Physics and Beyond' Organised by the Department of Physics

 Topic: 'Vedanta Philosophy and Literature of Vedanta' Speaker - Anurag Chatterjee Sem 5 Physics Honors Class roll No.: S-05 CU roll No.: 203211-21-0003 CU registration No.: 211-1111-0320-20

<u>Summary:</u> The seminar was arranged by department of physics on 'Physics and Beyond' and the selected topic was 'Vedanta Philosophy and Literature of Vedanta'. It was a brief outline of Vedanta philosophy, a popular part of Indian philosophy and the literature of Vedanta from the point of view of the 'nondualistic philosophy', a popular school of Vedanta philosophy, established by Adi Shankaracharya. The teachings of the non-dualistic Vedanta philosophy say that there is one eternal and absolute truth, the true nature of any worldly thing. This truth is blissful, infinite, omnipresent and ever conscious. And beyond of limitations like formation, destruction, name and form. This is a subject to realization only but covered by the ignorance. It can be unveiled through the path of knowledge. Realizing this truth one can attain liberation, the ultimate goal. Swami Vivekananda said, "Arise, awake, and stop not till the goal is reached." Except this absolute truth all things are subjects to formation and destruction. These teachings are spread in the various scriptures of Vedantic literatures.

 Topic: Kolkata food map Speaker: Tannishtha Mazumdar [CU roll no: 203211-11-0005, CU reg no: 211-1211-0346-20, college roll no: S-45] [sem 6] B.Sc (Hons) Physics Department of Maharaja Manindra Chandra College.

<u>Summary:</u> In the Physics and Beyond seminar, I had presented a topic titled "Kolkata food map". I told about some special restaurants in Kolkata and some of their dishes that are famous in North, Central, and South Kolkata. Kolkata, which is known as the "city of joy," is incomplete without food. Sometime we face problems finding a restaurant that serves tasty food. That's why, for the benefit of general audience, I have selected this particular topic. North Kolkata encompasses the northern part of Kolkata, including the city's oldest neighbourhood. In this region, some restaurants like Mitra Café, which is very famous for its Fish kabiraji, Golabari for its Chicken kosha, etc. were highlighted. South Kolkata is a posh and new addition to older Kolkata. It is less congested and more modern than most parts of the city. In this, we find many Bengali foods as well as foods from other regions. Fuji is a Japanese restaurant famous for Sashimi, and Saptapadi is famous for its Bengali thali. In central Kolkata, we find restaurants like Sabir, Peter Cat, Big Boss, and many more.  Topic : Surrealism Movement Speaker: NEHA CHANDRA ROLL: S-41 Physics Department

<u>Summary:</u> The seminar held by the department of physics and the selected topic was Surrealism movement. It is a revolution which took place in the world of art and literature. Surrealism means "super reality" where the real life aspects appeared in an unnerving distorted way or in these artworks. It was a technique developed to allow unconscious mind to express itself. Real life objects appeared unexpectedly in juxtapositions and often looked bizarre. But it gave artist the freedom to express their creativity. Such artworks developed under this movements are Golconde, Girl with a mask, The son of man, Guernica etc.

4. Topic: Abol-Tabol – A different story

Speaker : Bishan Kumar Brahma Department of Physics Semester: 6 CU Roll No.: 203211-11-0005 CU Reg. No.: 211-1111-0322-20 College Roll No.: S-09

<u>Summary:</u> In our childhood days, we had read Abol-Tabol, a famous book written by Sukumar Roy. Sukumar Roy is a great poet and painter. He wrote many poem short story and play. A popular radio channel said that Sukumar Roy is not human being, he is an alien but he spent some time on earth. 'Abol-Tabol' is basically based on 'non-sense' poem. Many people think that this book is only for children. But it is not true. There are political and social truth hidden behind this book. In some poem satirized the social condition of that time. He also criticized the British government. The most interesting fact is that he hid these facts in his poem. We should remember this great poet forever.

5. Topic: Misconception of Coulomb's Law.

Speaker: SAPTADIP CHAKRABORTY, ROLL NO. 213211-21-0008 REGISTRATION NO. 211-1111-0310-21 COLL ROLL NO. S-22 Sem 3

Summary: Coulomb's Law is widely regarded as one of the preliminary topics that students read in their early stages of science learning. So it is quite obvious that it leaves a lot of scope to misunderstandings. One of the most common misconcepts regarding this is that the Coulomb's Law (which primarily deals with the force of attraction/repulsion applied by one charge distribution on another) changes its form when it is applied in a linear dielectric medium. Well, that is certainly not the case. Coulomb's Law is invariant under transforming the medium taken in consideration. What makes this wrong is when a charge distribution (called free charge) is placed inside a linear dielectric medium, **bound volume charge** appears at each & every point where a free charge can be spotted. If you then try to get the *Electric Field* at anywhere inside the medium (assuming that the surface of the medium is at infinity), this is that bound volume charge which plays a key role there in changing the value

of Electric Field. So, as a whole, the *net* Electric Field eventually changes its value. But it neither disobeys the original form of Coulomb's Law (actually it is well understood from there), nor changes its form.

6. Topic: The future of Fusion energy Speaker  $\rightarrow$  ADIL ZAHIDEE Semester 5. Department  $\rightarrow$  PHYSICS Class Roll no  $\rightarrow$  S-01 CU Roll no  $\rightarrow \rightarrow 203211-21-0098$ . CU Reg ho $\rightarrow 211-1115-0316-20$ 

<u>Summary:</u> In this time we face a big Challenge, to produce an energy source which is an alternative of fossil fuels and It is good for nature. So I decided nuclear fusion is the best topic for this Seminar.

<u>Nuclear fusion :</u> Nuclear fusion is a reaction in which two or more atomic nuclei, usually deuterium and tritium, are combined to form one or more different atomic nuclei and subatomic particles. The difference in mass between the reactants and products is manifested as either the release or absorption of energy.

<u>Difference between Fission and fusion</u>: Fission is the Splitting of an atom into two or more smaller ones and fusion is the fusing of two or more smaller larger one atoms into a larger one.

<u>Why fusion is better than fission</u>: Fusion produces far more energy than that created by fission. Nuclear fission produces radioactive waste which is harmful in nature.

Fusion energy and Stars - Nuclear fusion reactions power the Sun and other Stars.

<u>How Scientists produce fusion energy in lab</u>: A tokamak is a device which uses a powerful magnetic field to contine plasma in the Shape of a torus. The tokamak is one of several types of magnetic confinement devices being developed to produce controlled thermonuclear fusion.

<u>Some Challenge of produce fusion energy</u>: In Fusion energy is the temperature required to Produce meaningful amounts of fusion power from an ionized gas that is commonly referred to as a Plasma. The necessary temperatures for fusion, energy Production Very depending on the type of fusion being pursued.</u>

/	DEPARTMENT OF PHYSICS	Date: 22-09-2022.
	DEPARTMENT OF PHYSICS Departmental Seminar	Room No 08.
01	Physics and Beyond	
SLNO.	Name of Students Semester Department-	Signation
<u> </u>	Tannishtha Mazandar Sem Il Physics (speaker)	Tannishtha Mgandor
2	Amiya Mohanta sem-vi physics	Annyer Manuta
3	Suppadeep Mondal Sem II Physics	Suppadeep Mordal,
4.	Score like an Al	Samdiba Mukherite
5->	ARPAN ROY SEM-VI Physics	
6.	JYOTIRMOY ROY SEM-VI Physics	AspanRoy Jyotirmoy Roy.
7.	Gobinda Paul SEMVI Physics (HOST)	Grobinda Paul
<b>8</b> `	ARNAB MAITY SEM-VI Physics	Arnab Maily
9.	ANURAG CHATTERJEE SEM- VI Physics (Speaker)	Amurag Chatterjee
10)	NILANJAN BANIK SEM-VI Physics	Obdayai Baile
!') `	PRATYAY SAHA SEM- & PHYSICS	Prakyon Suha
12>	Ayush Das Som-RI Physics	Ayush ale
	Sumit Que Sem-VI Physics	Suntas
14)	Esha Agarwal Sem - VI physics	Eska Agarwal
	Kaushi Kumari Bin, Sem-SI Physics	Kaushi Kumari Bin.
16> N	(elia Chandra SemVI Physics (speaker)	Nela Chardra

		CULTURE BEOLIGITES	) AUDA	22/09/2022
17	Kopishern Crhest	Sem-VI	Physies	22/09/2022
18	Akashpu Torun	Sem - VI	Physics	Alkashpu Tarun
ાલ,	ANIRBAN MULLICK	Sem-VI	Physics	Anorban millich
20,	Adi'l Zahidee (speaker)	Sem-VI	Physics	AlilZahider. Koustab Sarkar
21.	Koustab Sarkar	sem III	Physics	Koustab Sarkar
	Pratyush Das	Sem VI	Physics	Bolas.
	Samiran Podder	Sem D	Physics	Samiser Elder
	Protik Poul	Sem VI	Physics	$\cap$ $($
25	Asabinda Malakar. (speaker).	sem <u>vi</u>		Asabinda Malahan
26	Sayan Datta	sem <u>√</u> I	Physics	Sayon Datta
27	Riddhi Natu	sem- y	PHSA	Ridolli Nath
28	Esha Agarwal	sem-VI Sem-VI	DHSE	Esha Agaerwal
29)	Ankit Saha	Sem-1V	PHSA	Ankit Saha
	Roj Manma	n ,	MA	Ray Manna
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37) Name of Students RAJIB BANIK	Semuster Sem-IV	Defaortment PHSA	22/09/2023. <u>Signature</u> Rog'ib Banik
38) ROHIT MALLICK	Sem-IV	PHSA	Rohit Malerik
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40% Ayush Selle	SemIV	PHSA	Sungan Kunar Malanar Ayurh Leth.
41) Anindita Basak	SemIV	PHSA	Anindita Basak
42) Apalak Mulkherjee	Lem-I	PHSA	Apalak Mukherjee
43) Aritra Saha	Sem-IV	PHSA	Anitha Saha
44) Swarneli Dos (Wall magazine)	Seen - IV	PHSA	Geograti Das
45) Superiyo Mulcherijee	Sem-IV	p.H_SA	Seperizo Muchinge
46) Hausha Dhau	y th rum	PHSA	How ha Dhay
47) Bishan Kumar Brahma (Speaker)			Bishan Kunar Brahma

18) Aknam Paka

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Sem VI PHSA Aknam Paka

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