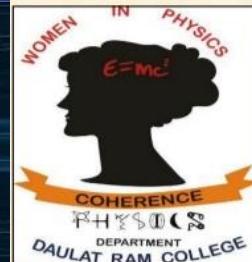


# LUMINEUX

Annual Newsletter of Physics Department

Edition 3



## TO THE SUBJECT, I HATED BEFORE

Last night , I saw a dream...  
Dark World made of Black Body  
who only emitted.....

I calculated the mass into  
acceleration.....  
with every possible  
procarnation.....

Because I wanted to be  
reflected.....  
Not only regularly but  
deflected.....

Then I step slowly  
like shell of Neil Bohr's.....  
So , I calculated all the Lorentz  
Force.....  
I am electron, I deviated.....

Wanted a compass or direction  
deviced.....  
Because all the Flemming's hand  
rules were on my table,  
unrevised.....

I should have learnt principles,  
could have slept later.....  
As all I was a zero, like a current  
in an insulator.....

They were wrong, the science  
laws I was applying.....  
I woke up, looked at my books,  
cursed myself for not using the  
knowledge, they were  
supplying.....

I straighten my bag and got  
READY!!  
Because I understood  
**"PHYSICS IS NOT A CUP OF TEA"....**

-ANUSHKA SHARMA

*"The mind is not a vessel to be filled but a fire to be kindled"*

- Plutarch

Physics is a fuel to mankind's constant endeavour of pushing boundaries and bettering itself, kindling the fire of ambition, coercing humankind to seek discomfort for a greater good. Sky is no longer a limit but an ever-expanding mass, analogizing our zeal to understand it. To infinity and beyond, we aim and Physics enables us to.

The passion to pursue and probe ceaselessly, trying to find answers to the physical world's most complex mysteries is what sets physicists apart and has left us in awe of this discipline. We can claim that a lot more than just gravity has made us fall for Physics.

Upholding the spirit to aim high and not stop till we reach there, we present the third edition to our annual newsletter, **Lumineux**.

Lumineux is the French word for light. This newsletter strives to be a metaphor that aims to replace the darkness of ignorance with the light of knowledge. It includes a report of all the activities that were conducted during the current session by the department and association, the latest discoveries that baffled minds in the world of Physics along with a little showcase of the students' creative expression.

-MUSKAN ARORA



-Aashee Sharma

From the End of the Rainbow to the  
Edge of Time—A Journey Through  
the Wonders of Physics

## FOR THE LOVE OF PHYSICS



Walter Lewin  
with Warren Goldstein

Popular for memorable  
physics lectures, Walter  
Lewin's book has  
quick-paced  
autobiography-cum-  
physics humor fully  
capturing his candor and  
lively teaching style.

## TEACHER'S & EDITOR'S NOTE

## ACTIVITIES

## SPACE

## DISCOVERIES

## ARTICLES

## CELESTE'20



Taniya Sharma



Kadeeja Irfana



Taniya Sharma

**"I WOULD RATHER HAVE QUESTIONS THAT CAN'T BE ANSWERED THAN ANSWERS THAT CAN'T BE QUESTIONS."**

-RICHARD FEYNMAN

# MEET OUR PROFESSORS



**Dr. Savita Roy (Principal):** She started the Physics honors course at undergraduate level in 2017 in Daulat Ram College. She is constantly involved in upgrading the quality of education imparted to students and at the same time finds time to pursue her research interest. She has all qualities that a teacher and leader should have. Thanks for having all the patience and even bigger hearts.



**Dr. Omwati Rana:** Being one of the most loved teacher, she never fails to have a lively approach towards life. Always encouraging sports and extra-curricular activities and making students familiar to a healthier path of life. She always entertain the doubts of students and makes it an interesting class. She is always energetic and motivating.



**Dr. Onkar Mangla:** Having a smiling face all the time, he is a great teacher. His witty questions and method of teaching is what makes him unique. He has a passion for physics and insists on understanding the depth of the subject. His strengths are coding and digital. He always helps students in labs and never deters from any laborious work.



**Dr. Neetu Agrawal:** Teacher-in-charge for the session 2019-20, she is a lively and optimistic person. Teaching comes natural to her. Loved by all, nobody ever gets bored in her classes. She always pushes the students to be more logical and quick and maintains a great level of study. Be it workshops, seminars or the fest season she believes in every phase of college life and encourages the students to make the most of it.



**Dr. Neeru Sehdev:** Being one of the most hard-working and disciplined teachers, she is punctual and creative. She has a unique way of teaching to make concepts clear and focuses on practical analysis. She is always ears to new ideas about activities and events. Also, she emphasizes on smart work and making life worth it. She is an organized and focused person.



**Dr. Tarun Choudhari:** Patience and passion are two words that describe him correctly. His attitude makes the students comfortable to open up to any discussion in class. A little bit of laugh as well as clearing the concepts are the two factors of his lectures. He is always ready to discuss the upcoming technology and developments. He is kind hearted and a hard working person.



**Dr. Shefali Jain:** With an honest smile, she is a hard working teacher. She always help students whether in lab or in theory. She also knows how to make everyone laugh and enjoys the little things of life. She always gives a heads up to events and workshops. With great determination she always helps out the students in the complex circuit making and tasks.



**Ms. Jyoti Chauhan:** Being one of the most young and talented teachers, she relates easily with the students by sharing her life experiences. She always refers to interesting books and emphasizes more on practical phase of subject as well as life. She has a great interest in poetry and art. She encourages students to find that one goal in life which should be your passion and aim for it no matter what.



**Dr. Disha Wadhwani:** As a warm, compassionate person with a zest for life she believes in hard work and trying everything. She is an optimist person and encourages students to see the silver lining as well. She is knowledgeable and open to every discussion. She wants the students to be curious and learn the wonders of life as well as science. She is a caring person and wants the students to see the best in themselves.

# EDITORS' CORNER (2019-20)



"Today a reader, tomorrow a leader."

- Margaret Fuller

Reading, not only grows the jargon but also has benefits of mental sustenance.

Lumineux is a get together of inventiveness and will take you through the recollections of the year. Being a member of the board has been an entirely different encounter of learning and exploring.

I did a great deal of inventive learning too. Will surely look forward to such an opportunity in the coming years.

- Akansha Singh (Editor)

We are really proud and exuberant to acclaim that we are ready with all new hopes and hues to bring out the 3<sup>rd</sup> edition which is going to unravel the world of the most unforgettable and previous moments of this journey. As the saying goes, mind like parachute works best when opened. This initiative allows the budding minds to explore the realm of imagination and experience the beauty of it. The reflection of the students' creativity and achievements is the epitome of this newsletter. The newsletter is the consequence of the combined efforts of the editorial board and I thank all of them.

- Yashasvee Goel (Editor)



Writing is always create a wonderful experience. I would have never said this before being a part of LUMINEX. I guess being a part of this was not just limited to what content we write and create but also the experience we get through it. Experience is always the best teacher. Being a part of this venture has definitely boosted up my confidence for exploring more and more things .We spend much time and energy here at LUMINEX telling untold stories that we think reflect what the COHERENCE is all about. *Happy Reading!*

- Kashish Tatu (Editor)



## Note from President of COHERENCE

From sitting alone on the last bench on the first day of college to still sitting on the last bench , it has been a great journey." It was much more special because the batch of 2017 is the first batch of Department of Physics, Daulat Ram College.

I had the honor of being the President of this department and serve it to the best of my capabilities. With love, affection, discipline and laughter interwoven in our Coherence it adds so many more emotions to this journey.

From struggling to find my way in this new place to acting like I'm at my own home, I didn't realize I will become this attached. I can say I've experienced everything during the course of these 3 years and I don't regret any part of it.

The bond with all the teachers is a special one and I would carry this guidance all my life.

Their role has been integral and motivating.

We'll carry the name of this department high up above and people will see us shining bright in whatever field we choose.

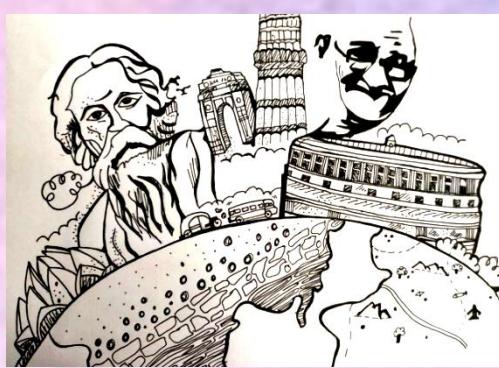
I take this opportunity to pay sincere gratitude to each and everyone who have been through this journey. It's been one great experience and with my heart filled emotions I bid adieu.



- Shreya Sharma (IIIrd Year)



Taniya Sharma



Ronak



Kadeejah  
Irfana

# DEPARTMENT and ASSOCIATION ACTIVITIES

## SKILL DEVELOPMENT PROGRAM

*“Technology can become the wings that will allow the educational world to fly farther and faster than ever before—if we allow it.”*  
- Jenny Arledge



An In house Skill Development Program on “**Latex and its Applications**” was organized by our department from 12<sup>th</sup> to 19<sup>th</sup> July 2019.

This program aimed at providing an opportunity to learn LaTex : a typesetting programming language.

The students showed keen interest in producing high quality technical and scientific typeset documents.

**Best report award** was given to **Sunidhi Rajpal (I<sup>st</sup> yr)** and **Parul (II<sup>nd</sup> yr)**.

## UNION ELECTIONS (2019-2020)

*“Leadership is not a position or a title. It is action and example.”*

Union elections were conducted in the department. The five positions were taken by **Shreya Sharma** as *President*, **Bhumija Chaudhary** as *Vice-President*, **Anushka Sharma** as *Treasurer*, **Aanchal Sharma** as *Secretary* and **Vanshika Sharma** as *Joint-Secretary*.

*Kudos to the elected candidates!*



## Inaugural lecture on “CAREER for PHYSICS STUDENTS”



*“Choose a job you love and you will never have to work a day in your life.” – Confucius*

Physics Association, Coherence conducted its inaugural lecture “Career for Physics Students” for the academic session 2019-20 on 21<sup>st</sup> August, 2019.

The students got an opportunity to listen from our honourable speaker **Prof. Amitabha Mukherjee** from **Department of Physics and Astrophysics, Delhi University**. He enlightened us about the various career opportunities emerging in the field of Physics.

The seminar was packed with interest and proved to be a very informative session.

At the end, the winners of various competitions as well as the office bearers of the association in the previous session 2018-19 were presented with the certificates of appreciation on this occasion.



*“LET BOTH SIDES SEEK TO INVOKE THE WONDERS OF SCIENCE INSTEAD OF ITS TERRORS. TOGETHER LET US EXPLORE THE STARS, CONQUER THE DESERTS, ERADICATE DISEASE, TAP THE OCEAN DEPTHS, AND ENCOURAGE THE ARTS AND COMMERCE.”*

- JOHN F. KENNEDY

## TEACHERS' DAY CELEBRATION

*"It is the supreme art of the teacher to awaken joy in creative expression and knowledge."*

— Albert Einstein



## FRESHERS' WELCOME CELEBRATION

To celebrate the beginning of yet another phase of life, Coherence organised a Freshers' party on September 6, 2019 to welcome all young women of Batch 2019-22.

Based on Bohemian theme, the colorful dresses of our pretty freshers' made the environment scintillating. The party started with great zeal and was filled with excitement, joy, music and laughter.

The freshers' showed their unique talents which were quite impressive. After the fascinating performances, our jury members Miss Parul and Miss Namita Joshi announced the title winners.

**Shagun Virmani** was honoured with the title of *Miss Fresher*, **Deepali Yadav** with *Miss Diva*, **Jyoti Yadav** with *Miss Talented* and **Aashee Sharma** as *Miss Brainy*.

The party winded up with cheering faces imprinting a deep feeling about sharing an everlasting bond with each other.



## Workshop on "QUANTUM MECHANICS and its APPLICATIONS"



Physics Department in collaboration with National Academy of Sciences India-Delhi Chapter organized a one day workshop on "Quantum Mechanics and its Application" on Sept 24, 2019.

The keynote speakers were:

- ❖ **Prof. Ajoy K. Ghatak** (Meghnad Saha Fellow of National Academy of Sciences, Former professor of Physics at IIT-Delhi).
- ❖ **Prof. Patrick Das Gupta** (Department of Physics and Astrophysics, University of Delhi).
- ❖ **Prof. Anirban Pathak** (Department of Physics, Jaypee Institute of Information Technology, Noida).

The speakers enlightened the students on the modern applications of Quantum Mechanics in current research which was a great motivating exposure.



Our Top ten scorers of Quantum mechanics quiz (awarded with a Quantum Mechanics book and certificates.)

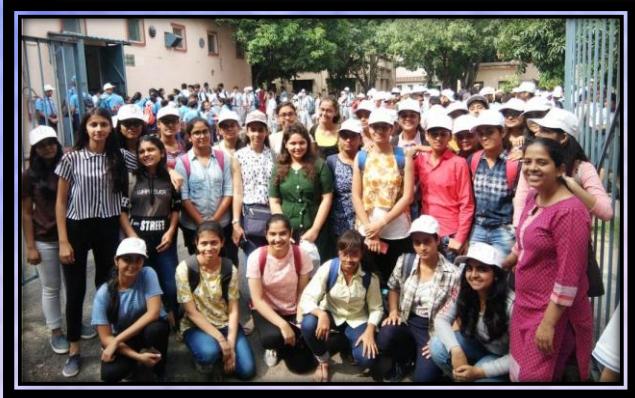
**"WE ARE LIKE SOME PARTICLE IN MOTION, ALWAYS MOVING AND MEETING OTHER PARTICLE."**

- SANTOSH KALWAR

## VISIT TO NATIONAL PHYSICS LABORATORY

*"Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious."*

— Stephen Hawking



On September 30, 2019, Coherence organised an educational trip to National Physics Laboratory (NPL), New Delhi. Around 30 students along with two professors, Dr. Disha and Dr. Shefali Jain, visited the laboratory. The visit was organised on the occasion of foundational day of NPL . It was a wonderful experience for budding learners as well as enthusiastic teachers. The students explored the advanced carbon product lab, nitrogen plant, solar panel area along with AC high voltage and current metrology section. It was a great trip which brought along a memorable and good learning experience.



*"Sports do not build character, they reveal it."*

The college conducted a sports meet to welcome the students and to encourage the importance of health and sports in everyday life. The students participated with great ebullience and showed true sportsmen spirit and team coordination.

**Kiran Kumari** won a gold medal in the event of both 100 and 200 metre race. **Deepali Yadav** and **Nisha Choudhary** won bronze medal in the event of three leg race.



## PHYSITIONARY and QUIZ COMPETITION

*"Questions are engines of intellect, the cerebral machines which convert energy to motion and curiosity to controlled inquiry."*

— David Hackett Fischer

Quiz not only enhances the knowledge but also improves the reflexes of a person. Keeping this in mind, COHERENCE, the Physics Association organized a Physictionary and Quiz competition on 15<sup>th</sup> Jan 2020 to test the wit and knowledge of our budding physicists.

In Physictionary, the pictionary of physics, students were allowed to converse via diagrams, graphs and logics to explain scientific terms.

The quiz competition had 3 rounds- (1) Written, (2) General quiz and (3) Question by choice.

Students not only dived into a healthy competition but were also given a dose of knowledge and optimism.

After a battle of curiosity and excitement, our winners were

- (1) **Kokil Adhikari** (2<sup>nd</sup> year) and **Taniya Sharma** (2<sup>nd</sup> year) in Physictionary.
- (2) **Ritika Kalra** (2<sup>nd</sup> year) and **Yashasvee Goel** (2<sup>nd</sup> year) in Quiz competition.



Winners of the day



**"THERE IS A SINGLE LIGHT OF SCIENCE, AND TO BRIGHTEN IT ANYWHERE IS TO BRIGHTEN IT EVERYWHERE."**

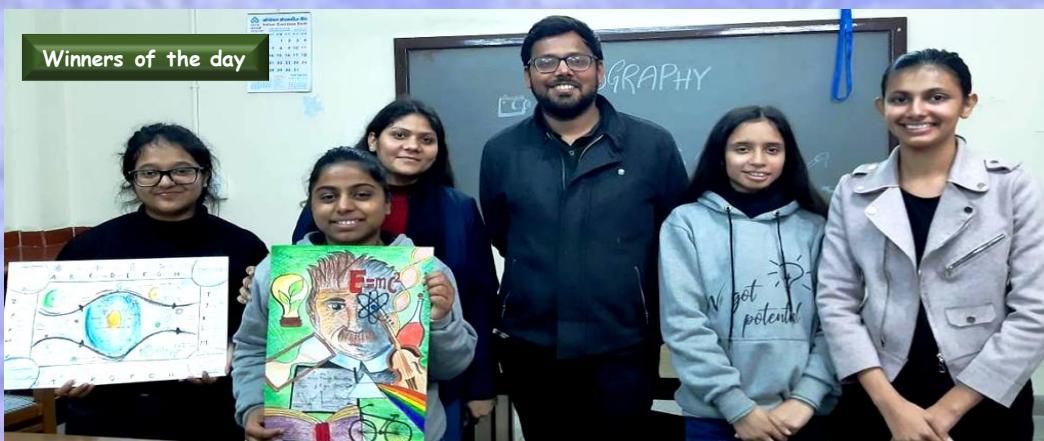
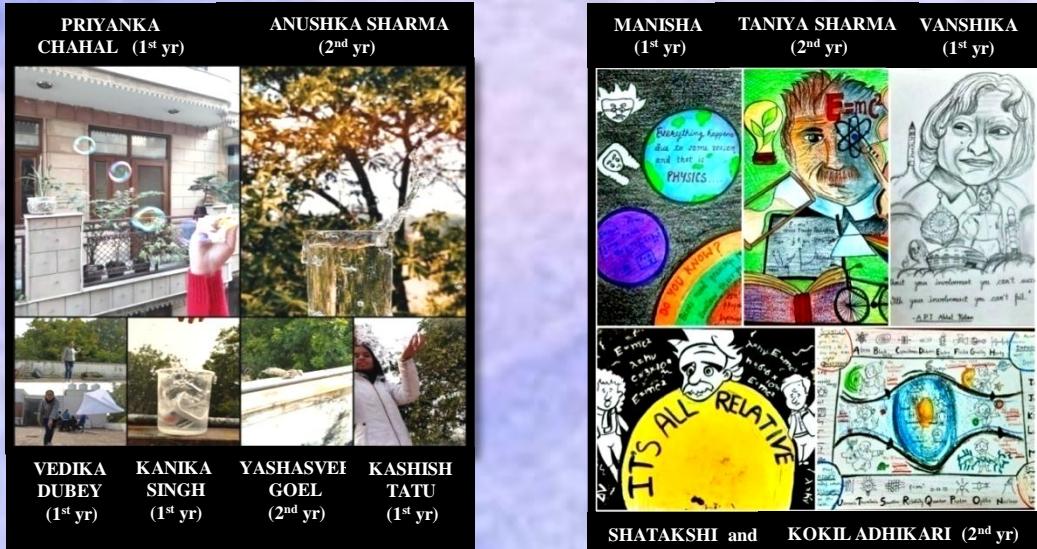
-ISAAC ASIMOV

## EMINENT SCIENTISTS AND SHOOTING PHYSICS IN NATURE

On January 22, 2020, Coherence- The Physics Association, organised yet another exciting activity for students to enhance and showcase their talent: “**POSTER MAKING AND PHOTOGRAPHY COMPETITION**”.

‘**FAMOUS SCIENTISTS**’ was the theme for poster making competition in which the participants displayed their creativity by framing their ideas in colourful posters.

The theme for photography competition was “**PHYSICS IN NATURE**” wherein students were to show their photography skills by clicking a photo which depicts a physics based phenomenon occurring in nature.



The participants portrayed attractive posters and took amazing photographs which were finally shown to our respected judges - Dr. Tarun Choudhari and Ms. Jyoti Chauhan with exclusive scientific explanations.

**Priyanka Chahal (1<sup>st</sup> year)** and **Anushka Sharma (2<sup>nd</sup> year)** secured the I<sup>st</sup> and II<sup>nd</sup> positions respectively in Photography competition while **Kokil Adhikari (2<sup>nd</sup> year)** and **Taniya Sharma (2<sup>nd</sup> year)** secured the I<sup>st</sup> and II<sup>nd</sup> positions respectively in Poster competition.

## VISIT TO VIGYAN SAMAGAM

Coherence organized a visit to **Vigyan Samagam**, the mega science exhibition at National Science Center on February 14, 2020. Students were accompanied by professors Dr. Neetu Agrawal, Dr. Neeru Sehdev, Dr. Tarun Choudhari, Dr. Shefali Jain, Ms. Jyoti Chauhan and Dr. Disha Wadhawan.

Throughout the day they learned about upcoming space technologies and telescopes. The science museum was the fun part and enjoyment was at its height.

Being physics students all of them were able to understand things deeply.



“**WORDS ARE, IN MY NOT SO HUMBLE OPINION, OUR MOST INEXHAUSTIBLE SOURCE OF MAGIC.**”

-JK ROWLING



## **CHANDRAYAAN 2 : A MISSION TO THE MOON**

- Priyanka Lamoria



❖ **PROJECT DIRECTORS:** Ritu Karidhal

Muthayya Vanitha

**CHANDRAYAAN-2** is India's planned SECOND lunar exploration mission to the moon developed by the ISRO.

It is a follow up mission from the Chandrayaan -1 that assisted in confirming the presence of water/hydroxyl on the moon in 2009.

❖ **THREE KEY STAGES:** (1) Lunar Orbiter (2) Vikram Lander and (3) Pragyan Lunar Rover

❖ **LAUNCHED ON:** 22<sup>nd</sup> July 2019 from the Satish Dhawan Space Centre by using GSLV MK III rocket.

❖ **MISSION:** To explore the mysterious south pole of the moon. The scientific goals include orbital studies of lunar topography, mineralogy, elemental abundance, the lunar exosphere and signatures of hydroxyl and water ice.

❖ The spacecraft entered the lunar orbit on August 20, 2019

❖ **CONCLUSION:** On September 6, 2019 the historic moon landing was attempted but Vikram Lander missed the moon by just 400 m above the lunar surface.

❖ **SUCCESS:** The orbiter continues to collect high resolution images which will be immensely useful to the global scientific community.

### **PEAKS OF UPCOMING ISRO EVENTS**

- Bhumija Chaudhary

#### **ADITYA-L1: India's mission to the Sun**

The first Indian based Solar Coronagraph to study solar Corona in visible and near IR bands.

#### **EXPOS at PLANETARY EXPLORATION**

To study neutron stars, supernova remnants, pulsars and regions around black

#### **SHUKRAYAAN 1**

This Venusian mission is a planned orbiter to Venus to study the surface & atmosphere of Venus.

Scheduled for  
2020

#### **CHANDRAYAAN 3**

To setup habitat on the lunar surface.

#### **GAGANYAAN**

Indian crewed orbital space craft carrying 3 people who will remain in space for 7 days.

#### **NASA-ISRO Synthetic Aperture Radar (NISAR)**

The first dual band radar imaging satellite.

#### **INDIA'S SPACE STATION**

The station (weighing 15-20 tonnes) will be able to host people for 15-20 days.

Scheduled for  
2021-22

### **VENUS: THE HOTTEST PLANET**

Venus is the hottest planet in our solar system having an average surface temperature of ~ 450° C as Mercury has no atmosphere to regulate temperature and has a very large temperature fluctuation.

### **APOLLO FOOTPRINTS WILL REMAIN**

The footprints of the Apollo astronauts, along with spacecraft prints, rover-prints and discarded material will be on the moon for million years as there is no atmosphere on moon and therefore no wind to erode the surface and no water to wash the footprints.

### **ONE DAY ON VENUS IS LONGER THAN ONE YEAR**

Venus has a slow axis rotation which takes 243 Earth days to complete its day. The revolution/ orbit of Venus around the Sun is 225 Earth days, making a year on Venus 18 days less than a day on Venus.

### **CLASH BETWEEN THE MILKY WAY AND ANDROMEDA GALAXIES**

The Andromeda Galaxy and Milky Way Galaxy approach each other at rate of ~ 110 km/s (68 m/s) implying a collision in ~ **3.75 BILLION YEARS** eventually forming a giant elliptical galaxy.

### **FLOATING WATER IN SPACE**

Astronomers found a massive water vapour cloud holding 140 trillion times the mass of water in Earth's oceans ~ 10 billion light years away – the **largest discovery of water** ever found!!!

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-RITIKA  
KALRA

## DARK MATTER and EXOPLANET DISCOVERIES WIN NOBEL PHYSICS PRIZE 2019

"For contributions to our understanding of the evolution of the universe and Earth's place in the cosmos."



"For theoretical discoveries in physical cosmology"

JAMES  
PEEBLES

MICHEL MAYOR  
and  
DIDIER QUELOZ

- Shagun Virmani and Vanshita Bharia

*"For the discovery of the first exoplanet, a planet outside our solar system, orbiting a solar-type star in our Milky Way"*

The government of India has conferred the prestigious **PADMA-SHRI AWARD**, the fourth highest civilian honor in the country, to **PROFESSOR HARISH CHANDRA VERMA** for distinguished contribution in the field of science and technology in the country.

### Physics guru who shaped many dreams

Prof HC Verma "epitomises outstanding teaching ethos of IIT-Kanpur", said the director of the prestigious institute Prof Abhay Karandikar.

Instrumental in setting up Shiksha Sopan, an NGO that helps underprivileged children in education, Prof Verma has been the reason why many children have got access to quality education, he added.

Prof Verma is a well-known name in the field of education, thanks to his physics books which continue to be widely used in schools and colleges. Apart from his research on nano fabrication, magnetism in graphite on irradiation by ion beam and nano magnetic material, Verma worked tirelessly on developing experiments to make science interesting for schoolchildren.

He has developed more than 600 physics experiments, which can be used by teachers as demonstrations in classrooms and also produced 45 video lectures in Hindi for school level.

Prof Verma joined IIT-Kanpur in 1994 as an assistant professor. For IIT-Kanpur, in fact, it was double delight as Prof Sudhir Jain, director of IIT Gandhinagar and formerly a faculty with IIT-Roorkee, was awarded a Padma Shri from Gujarat.



HARISH CHANDRA VERMA  
PADMA SHRI | SCIENCE & ENGINEERING

### IMMORTALITY OF QUANTUM WORLD

Quasiparticles decay after some period of time but reorganize themselves in such a manner that they are not at the edge of extinction.



### ACTIVE VENT-HOLES ON VENUS

ESA's Venus Orbiter measured the amount of infrared light emitted from the surface to enlighten the volcanism on Venus.

### FIRST EVER QUANTUM TELEPORTATION

Generation and manipulation of single particles within programmable nanoscale circuits leads to the teleportation between computer chips harnessing silicon photonics chip fabrication.

### GIGGLES

Heisenberg was driving down the Autobahn where upon he was pulled over by a policeman. The policeman asked, "Do you know how fast you were going back there?"

Heisenberg replied "No, but I know where I am".....

Why is it best to teach physics on the edge of a cliff???

Because that's where students have more potential energy.....

Why did the sun not go to college????  
Because it already had a million degrees!!!.....

Where does bad light end up????  
In a prism.....

A little boy refused to run anymore. When his mother asked him why, he replied "I heard the faster you go the shorter you become".....  
(compiled by Latika)

"Take care and keep updating" said my father when he hugged me while departing on the airport. With these words of warmth and security I began a new adventure of my life – a new phase – Pune, here I come. I was here to attend my internship on "*Internet of Things*" at Smt. Kashibai College of Engineering organized by Experts Hub. IoT is simply the network of interconnected things/devices which are embedded with sensors, software, network connectivity and necessary electronics that enables them to collect and exchange data making them responsive. As the days passed by the internship dived into the field of technology and its future. All participants were divided in 6 teams and a project was given to each team. In just a matter of 8 days we all became comfortable with the ongoing training and the daily tasks and quiz. In a room full of engineers I found myself in an awkward situation but there were CSE students who had never used a breadboard and there were EC students who were surprised to know that I know about microprocessors. So, all it took were some sleepless nights, some long team discussions and so many memories. But at the final day we all were nostalgic and packed with emotions. Thank you Pune for being so wonderful! And for a great learning experience!

-Yashasvee Goel

### PHYSICS DEPARTMENT HOODIES



Designed by  
Muskan  
(2nd year)

# A MOMENT of CREATIVITY

To  
Alien 237  
Hesperia Planum  
Southern Highlands  
Planet No.4  
Mars

Dear alien 237,

I hope you are well. Thanks for your letter and it was great to hear from you after so many years.

Thanks for the photographs. I absolutely loved your family, friends and places...it seems very calm and quiet. I wish to see your places especially Noachis Terra and Valley Marineris and to know more about the huge volcanos and craters on your planet.

Do you have any idea how valley marineris came to be? We got some information about the north pole in your planet by our phoenix lander few years before. Have you heard or seen it?

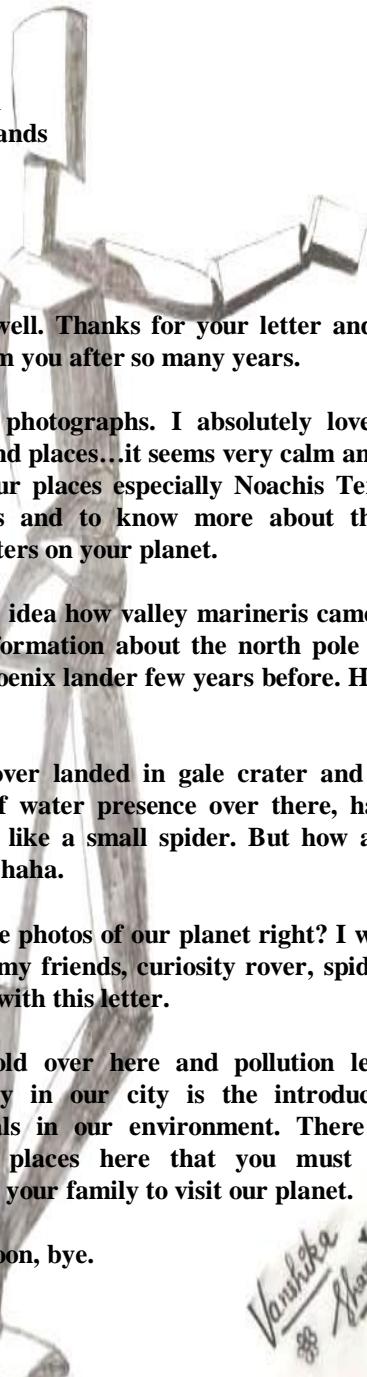
Our curiosity rover landed in gale crater and we got some evidence of water presence over there, have you seen it? It looks like a small spider. But how a spider looks like to you..haha.

You asked for the photos of our planet right? I will keep some photos of my friends, curiosity rover, spiders and our places along with this letter.

We feel very cold over here and pollution level has increased rapidly in our city is the introduction of harmful materials in our environment. There are so many beautiful places here that you must visit. I welcome you and your family to visit our planet.

I hope we meet soon, bye.

Delhi (Earth)  
From  
Kadeeja Irfana



## "Baarish Ki Boonde"

Baarish ki boonde, jo aake bhigakar to jaye,  
Lekin khud ka pata, khud ke sath hi le jaye.....  
Ehsaas se to ho jo bhi,  
Lekin sab kuch hokar bhi jo kuch bhi nhi.....  
Hawaaoon ke jhookon ke sath, jo uditi chali jaye,  
Khud hai kahan bas talash hi rah jaye.....  
Thande thande gagan se aakr, jo garm dhra me samaye,  
Vajood itna h intka ki gayab hokr bhi saboot de jaye.....  
Mehak hai intki sabse alag, jo har man ko bhaye,  
Shamo-shubha ek pal ko to, har koi isse mukhatib hona chahye....  
Taqdeer bhadut badalti hai yein,  
Gamon ko khushiyon or khushiyon ko gamon me tafdeer karti h yein.  
Aati hai dhra ki dost bankar,  
Or dulhan ki tarah sajai chale jati h ye....  
Aisi hi hain ye baarish ki boonde, jo aake bhigakar to jaye  
Lekin khud ka pta, khud ke sath hi le jaye.

- Kashish Tatu

## Are you intrepid??

When the times seem tough, recall the efforts you made at the dawn.

When the changes are inopportune, work, so that towards you are the forces drawn.

When some weakness shows up, make sure that despondency is not your way.

Mistakes are always possible as long as you know how to not make them stay.

Never get worried or excited by small affairs, the secret to get to gigantic things.

Do not be afraid of threat in order to know the flying potential of your wings.

Practice in quietude, for the triumph shall speak for itself.

Keep seeking, keep scanning, for there is never too much on the bookshelf.

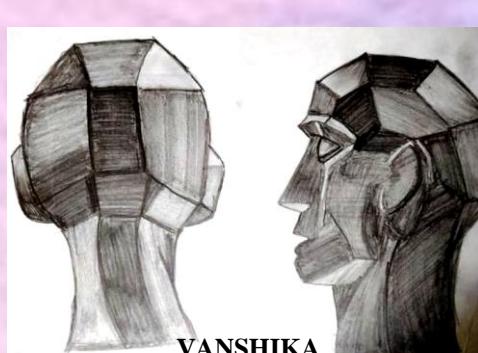
Never lose hope, no matter how bleak things look, the only rope that pulls one up.

Question, argue and learn, never letting the curiosity dip in the cup.

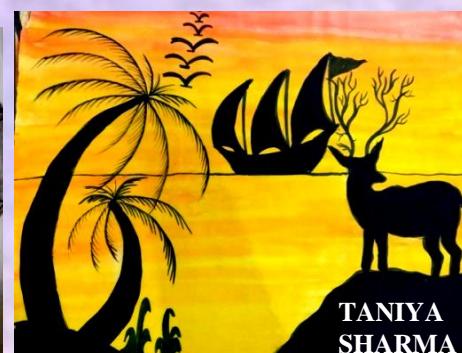
- Akansha Singh



KANIKA



VANSHIKA



TANIYA SHARMA



**COHERENCE** - the Physics Association, Daulat Ram College organized it's annual departmental fest **CELESTE'20** on February 13, 2020. The fest hosted exciting events covering all the flavors and tastes. The day began with the inaugural ceremony presided over by Dr. Pooja Jain (IQAC observer). The fest was declared open and then the events followed. They were:

**VISIONARY:** The participants had to decode sci-fi movies and then create their own sci-fi.

**IMPROMTIUM:** A minute to steal the show.

**PHYNGO:** This was the exciting physics bingo. With a clock ticking over heads, the event became more competitive.

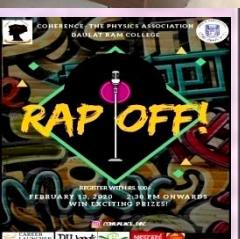
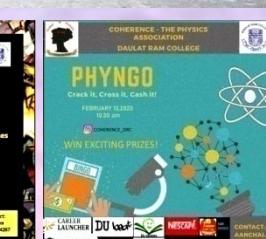
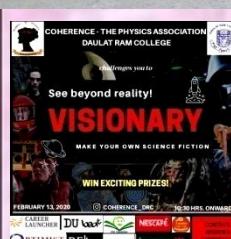
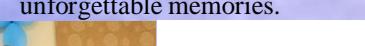
**CONNECTICON:** Here in this tag team challenge, the participants had to complete a circuit with a given aim.

**ENDGAME:** In this treasure hunt the teams had to find all the infinity stones and save the world with their skills and quickness.

**RAP OFF:** This was a rap battle which took place at the end and boosted up the energy of everyone.

Students from various colleges came enthusiastically and the day observed a large gathering. It was filled with joy and enjoyment. At the end of the day our respected Principal madam Dr. Savita Roy presided over the event and concluded the fest.

Finally the day ended up with a lot of happy faces and unforgettable memories.





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University of Delhi

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