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LUMINEUX

COHERENCE

DEPARTMENT OF PHYSICS

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Edition 1, Volume 1

"Old Man's Advice to Youth: 'Never Lose a Holy Curiosity.'"

Curiosity has its own reason for existence. The important thing is not to stop questioning. One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality. It is enough if one tries merely to comprehend a little of this mystery each day.

Carrying the spark inside us, the Physics department of Daulat Ram College presents their first edition of annual newsletter "**Lumineux**"

Physics is, in some senses, the oldest and most basic pure science; it's hard to define physics because it keeps changing all the time with new theories and insights.

Not only that but typically, each new insight leads to yet more and more questions, many of which remain unanswered.

"What counts, is not what you cover but what you uncover. Covering subjects in class can be boring exercise. But uncovering the laws of Physics and making them see through equations, on the other hand, demonstrate the process of Discovery, with all its newness and excitement."

LUMINEUX is a journey which is just started and is waiting to capture the Horizon it will glorify with every year passing. We are in many ways unimaginably small within this universe, yet uniquely special. We have the power to go to space, are self-aware, and masters of our own destiny. Yet we are on a small planet circling a very average star, spiraling around a massive galaxy of hundreds of billions of stars. That galaxy, on top of that, is just one of billions of galaxies. Yet we are alive today, and that is a gift no one can undervalue.

(BY:- Tannu Garg)

"There is no science in this world like Physics. Nothing comes close to the precision with which

Physics enables us to understand the world around us"- Albert Einstein

PHYSICS IN EVERYDAY LIFE

"All sorts of technologies which we used in our daily life are related to physics ". Everything surround us is made up of matter. Physics explain matter as combination of fundamental particles which are interacting through fundamental forces. From opening an electric switch to launching a rocket in space in every phenomenon, physics is applied. Physics is all around us. Example related to physics is: - walking on road uses the friction and gravitational law, a refrigerator uses thermodynamics principle, we are able to see different colors due to the various phenomenon of physics. Hence, we can say that our world is ruled by physics.

(By: - Srishti Aggarwal)

====OUR GURUS=====



Dr. Savita Roy (Principal and HOD of Physics Department, Daulat Ram College). She is excellently working for Daulat Ram College to achieve great heights of academic, intellectual, and personal achievement. With her efforts, the course B.Sc(H)physics started first time in 2017 in our college. She believes that physics is all about prediction and guessing about measurement. She has all qualities that a teacher and a leader should have. Thank you for having the smallest of tempers and biggest of hearts.



Dr. Omwati Rana (Teacher In-charge, Physics Department). With some extraordinary art, she is always ready to solve tricky situations and tricky derivations in an easy way. She is always energetic. Her time management makes students enthusiastic for studying. She always encourages all of us to participate in events and activities for students' development. One can learn the idea of time management from her.



Dr. Neetu Agrawal It is the supreme art of a teacher to awaken joy in creative expression and knowledge and indeed Neetu mam has excellence in this art. She is admired not only for dignified elegance but also for her understanding, demeanor, great presence of mind, ability and excellent teaching skills. Students never get bored in her class. She works tirelessly to create a challenging and nurturing environment for her students.



Dr. Onkar Mangla A very interesting teacher with always a smiling face. He loves to ask tricky questions to students'. The way he makes everything easy and straightforward to learn is praiseworthy. He is not only admirable in physics but also has unbeatable computing skills and coding languages skills. The way he makes coding incredible and interesting is superb. He is very patient with students and a very helpful and kind teacher.

(By: - Kritika)

Tanika Gupta "Your imagination is your preview of life's upcoming attraction". As the part of the editorial board I am feeling highly obliged why simply expressing my views and thoughts and by being a part of this compilation. It gave me a sneak peek into the world of writing. I thoroughly enjoyed it, and if I had the opportunity again I would accept without batting an eyelid.



Tannu Garg Physics Lumineux is an explosion of creativity and flashback of the Year gone from enthralling poems to fascinating paintings, engrossing article to spellbinding report it is an assembly of creativity." The value of college education is not learning the facts but the training of mind to think in an interesting manner". It's been an thrilling experience to be a part of the team. Happy reading!



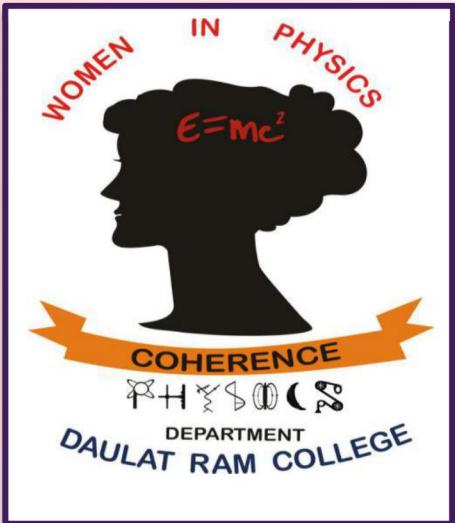
Jyoti Jangra "Writing is an exploration you start from nothing and learn as you grow" it's been unprivileged to be a part of the editorial board I hope As You Flip through the pages striving to Spot Your snapshot or article you are stuck by something that makes you grin from ear to ear and may that smile persist in every walk of your life.



-EDITOR'S NOTE-

DEPARTMENTAL ACTIVITIES

WINNING NAME & LOGO



(BY: - KADEEJA IRFANA)



INAUGURATION & LOGO MAKING COMPETITION

B.Sc. (H) Physics course has been introduced in academic session 2017-18. The inauguration function of B.Sc. (H) Physics course held on 25th July, 2017. The occasion was graced by the presence of Prof. Sanjay Jain, Head of Department of Physics and Astrophysics (DU), Prof. M. P. Srivastava, Retired Prof., Department of Physics and Astrophysics, Delhi University, Dr. Daya Aggarwal, Retired Associate Prof., Physics Department, Daulat Ram College and Dr. Savita Roy, Principal, Daulat Ram college. A logo making competition was organized on 24th July 2017 where students came together in groups to create a symbol and decide the name for the society. The girls participated with lots of enthusiasm and showed great creativity. Out of several posters for logo ,logo made by Surena was selected as Physics association logo. The name 'Physics' was calligraphed by Himanjali Varshney. It is a coincidence that the name of physics association " COHERENCE" was also proposed by Surena. In physics, coherence is an ideal property of waves that enables stationary interference.

(BY:-Shreya Sharma)

VISIT TO NATIONAL SCIENCE CENTRE

An Educational trip to National Science Centre has organized by Physics Department on 12 August, 2017. Around 25 students along with two teachers (Dr. Neetu Agrawal and Dr. Onkar Mangla) visited the place. Students visited different galleries like water: the elixir of life, hall of nuclear power, our science & technology heritage gallery, pre - historic life gallery, fun science gallery, information revolution gallery, emerging technologies gallery at different floor of NSC. Students learnt about various ways to preserve and use water effectively, observed various water treatment models etc..

At the end, there was screening of a 3D movie named 'THE GALAPAGOS' that revealed the truth and beauty of one of the foremost destinations of wildlife viewing. The trip was full of information and excitements.

(BY:-Kajal Kaushik & Priya Singh)

"The fact which distinguishes physicists from ordinary people is their willingness and curiosity to know about everything." - Kajal Kaushik

HANDS ON CREATIVITY

I am not lazy; I'm overflowing with Potential Energy

Physics exams would petrify me to the core! My palms would go sweaty, my breath would go out of control and my vision would get blurred, hindering my focus. It would get worse when I would look around and see everyone else working and I knew that I was the only one who couldn't perform. This was my story before 10th grade.

But my student life transformed when I was done with my matric education. That was the time when I started relating the derivations and set of equations with the world around me. I had begun my passionate journey in the field of Physics. I was in my own world of imagination had begun to question things around me. Often I'd try to figure out answers to these questions. The universe at once seemed resolved. For the first time I realized that studying is not just for scoring but it can feed my curiosity too. I truly understood the phrase 'Physics is theoretical but the fun is real!' as I thoroughly enjoyed the subject. However, there is still much to learn and many unresolved questions in my mind. 'Curiosity' my biggest teacher will continue to keep me up at nights.

As a student, I feel that all of us should realize the beauty of Physics and explore the infinite possibilities instead of fearing it. Let us be open to learning with passion. We must understand that you and I are overflowing with potential energy and the most precious thing is yet to be discovered.

(-By Surena)

In a parallel world

Nineteen o five
When science took a big dive
Relativity was discovered
With numerous concepts covered
All got different perception
With own special facts and correction
Time waits for no one
And the twin brothers got to know one
With greater mass comes greater energy
So humans could not break the synergy
All wish to travel time
Infinite energy one has to climb
Things were simple for constant motion
Speeding things were the left potion
Albert connected it with gravity
And the general idea was accepted happily
Imagination lies deep within
Those fearless to express finally win!

(By: - Tanika Gupta)

WONDERS OF PHYSICS - TWIN PARADOX BEING ONE OF THEM

"I am like a boy playing on the seashore collecting pebbles and shells whilst the great ocean of truth lay all undiscovered before Me." is what Isaac Newton once said and to think he is one of the greatest physicists ever known! Guess where we stand when compared to him. It's undeniable that Physics is full of endless possibilities. If studying Physics doesn't blow your mind then trust me you are doing it wrong! It's impossible to pinpoint the most astonishing fact of Physics but I would feel privileged to share the first experience while studying Physics which made me restless and overly excited. While studying Time Dilation under Einstein's Special Theory of Relativity I came across the term 'Twin Paradox'. When I was taught 'Twin Paradox', I was astounded. "Is such a thing even possible!?" is what I thought. I was so impressed that I googled it and watched YouTube videos about it. Yet again I was reminded that - Dude its Physics you are studying not some stamp collecting! That was when I convinced myself to be ready for many more upcoming surprises. Anything and everything is possible if Physics is with you. So, if someday a girl appears in front of you out of nowhere in a strange machine claiming that she is your grand grand daughter and has come from future then you might as well believe her because it's physics we are talking about!!

(By- Pratibha)

Physics- An inventory

The story
When physics took birth was all
About mother nucleus and its electrons
As time ran fast, lap become big
And here come quarks and neutrons

It's infancy, what I think it was,
Hasteful adulthood followed for a cause
Rockets were launched sooner than later,
Discoveries made their way greater & greater.

Now we know our sister galaxies and black hole,
Quantum physics is itself the nebular goal
So, here are we holding revolutions hand;
Binding inventory beads in universal strands.

In basics we enjoy ground needs;
A salute to those for their blissful deeds

The loses have been made no doubts
But the repentances had made us proud;
LED on the count Uno for environment
And yes, the pledge of Harmony is henceforth the commitment

(By: - Anshu Tyagi)

PHYSICISTA VISIONISTA



(BY-SARA NEGI)

(BY-KADEEJA IRFANA)

(BY-TANICA GUPTA)

(BY-KADEEJA IRFANA)

RIDDLE-O-GIGGLE

NEW IN TOWN

NOBEL LAURETTES 2017

The 2017 Nobel Prize for Physics was jointly awarded to American physicists **Barry Barish, Kip Thorne and Rainer Weiss** for detection of **Gravitational waves** which were first predicted by Albert Einstein more than 100 years ago.



Kip Thorne

Rainer Weiss

Barry Barish

(BY:- Himanjali)

SOME MORE CREATIVITY



(BY:- Komal & Kajal Shamra)

Q: Why can't you trust an atom?

A: They make up everything

Q: What is the name of the First electricity detective?

A: Sherlock Ohms

Q: Why are quantum physicists' bad lovers?

A: Because when they find the position, they can't find the momentum, and when they have the momentum, they can't find the position.

Q: What do you get when you mix Sulphur, tungsten, and silver?

A: SWAG

Q: What do you call an Atom when it dies?

A: A Diatom.

Q: Why did Carbon marry Hydrogen?

A: They bonded well from the minute they met.

A neutron walked into a bar and asked, "How much for a drink?" The bartender replied, "For you, no charge."

(BY: - Tannu Garg)



WOMEN IN PHYSICS

"Little girls with dreams become women with vision"

OF all the science, physics continues to have the lowest representation of women. When we are asked to name a “scientist”, we immediately think of Albert Einstein, CV Raman or APJ Abdul Kalam but when we are asked for the name of Indian woman scientist, we most often draw a blank. The problem is not that there aren't enough women in the field of science in India. But the problem is that they are not well recognized and not credited for their accomplishments. Let's all celebrate the accomplishments of women in Science in India.

ISRO's achievement of launching 104 satellites in one goes has given us a glimpse of the “Rocket Women” of India. Soon after setting the world record, these women came in the limelight. While you may already know some of them from the famous Mars Orbiter Mission or Mangalyaan project, let's get to know some of them at once.

MINAL SAMPATH

For two years, Minal Sampath, a systems engineer working on India's mission to Mars, worked flat out in a windowless room, often for 18 hours a day, to be ready for the country's most ambitious space project to date.



MOUMITA DUTTA

This intelligent woman became one of the top ISRO scientists; part of a team that worked on India's acclaimed Mars Mission. Today, she is heading a team to make indigenous progress in optical sciences as a part of 'Make in India' initiative.



RAJESHWARI CHATTERJEE

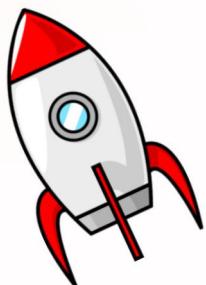
She was the first woman engineer from Karnataka. In 1946, she was given a scholarship by the (then) Gov. of Delhi to study abroad, and studied at the University of Michigan. After obtaining a Ph.D. degree, she returned to India and joined the Department of Electrical Communication Engineering at IISc as a faculty member.



“We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something and that this must be attained”-
MARIE CURIE (a gifted woman herself)



THERE IS
NO FORCE
EQUAL
TO A
WOMAN
DETERMINED
TO RISE.
—WEB. DUBOIS



GLORY CONTINUES...

TRIP TO ASOLA BHATTI WILDLIFE SANCTUARY

During World wild life week (1-7 October 2017) Physics Department organized educational tour to Asola Bhatti Wildlife Sanctuary in Southern edge of city of Delhi at Terminal of Aravali hill Range, on 6th October 2017. Around 33 students from various streams Physics, Biochemistry and B.A program have visited the place along with two faculties (Dr. Omwati Rana, Dr. Onkar Mangla). Butterfly garden, natural habitat for growth of Mauschar plants, artificial waterfall and rainbow effect creation etc. were the main highlights of the visit.

(BY:- Tannu Garg)

LECTURE ON CAREER COUNSELLING

On 26th November, 2017, Department of Physics organized a seminar on Career Counseling entitled "Career Planning in Real World". Around 100 students (Physics, Mathematics) attended the seminar. Honourable Principle madam, Dr. Savita Roy, inaugurated the event. Afterward Prof. Ishan Ranjan, President, Center for Career Development (CCD) and a member of big team at CCD headed by Mr. Jitin Chawla, Director, CCD presented the first session. He delivered a lecture on career in Physics and Mathematics. He informed the students about exams like JAM, GATE, NET held at national level for pursuing career in Physics. In the second session Mr. Anmol Rana, junior staff at CCD guided students about their career in fields other than Physics/Mathematics as MOOC, Fashion designing, Management, Content writing etc.

(BY:-Tarushi)

QUIZ & T-SHIRT DESIGN COMPETITION

On 10th Jan 2018, Physics society "COHERENCE" organized a "Quiz Competition". Around 42 students of B. Sc (H) Physics, Mathematics participated. Also, a T-Shirt Design competition was organized on 17th Jan 2018. 30 students participated and showed their creativity in designing the T- Shirt. In totality it was an exciting and fun activity for all.

Upcoming events

- ✓ Seminars
- ✓ Presentations
- ✓ Visits

TEACHER's DAY CELEBRATION

"One good teacher in a lifetime may sometimes change a delinquent into a solid citizen" -Philip Wylie,American On 5th of September Teachers' Day is celebrated.We,the first batch of B.Sc (Honours) Physics of Daulat Ram College,got the privilege on 5th September,2017 to extend our heartfelt gratitude to our beloved teachers who are our path shapers and celebrate this day in a simple yet memorable manner.The celebration was made more graceful by the presence of Dr.Savita Roy ma'am,the Principal of Daulat Ram College .As a part of the celebration,a small cake was cut by our respected Savita Roy ma'am and small tokens of love and regards were presented to our beloved teachers.No celebration could have been apt enough to convey our gratitude and indebtedness for all their love and dedication.made so special by the presence of our beautiful and dynamic teachers and this has left an indelible mark in the hearts and minds of the students of Physics. Department.

(BY:-Rajkumari Babysana)

SPORTS STARS



Mahima Sharma

Kho-kho
Championship-
1st position (Bharti cup& Shaheed Rajguru cup)



Archana Shereon

Intercollege
athletics'
competition 4into
100 meter relay
race-3rdposition



“The only limits you have are the limits you believe” – Wayne Dyer