



DELHI PUBLIC SCHOOL, GURGAON
REPORT- SEPTEMBER (2020-21)

Name of the Club: REDSHIFT

Teacher-in-charge: 1. Ms Sunita Kandpal
2. Ms Parmita Dey

Teachers Associated with the club: Physics department

Presidents: 1. Richeek Dutta XII J
2. Asmit Agarwal XII L

Secretaries: 1. Udit Ohri XI I
2. Lakshyaditya Bhatnagar XI I
3. Kartik Ahluwalia XI G

Month: September

Activity: Workshop: Komorebi II- interplay of activities and ideas in optics

Classes involved: XII

Platform: Zoom

Duration: 1.5 hr

Resource Person: Dr Rajeev Tyagi

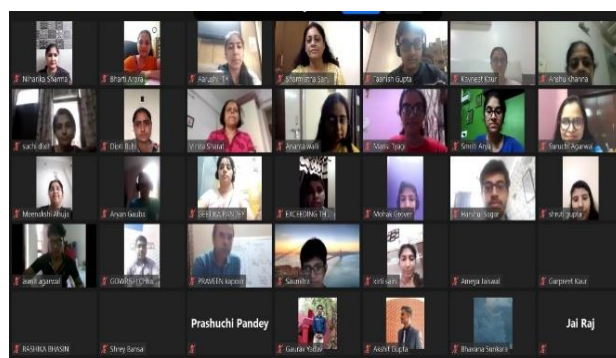
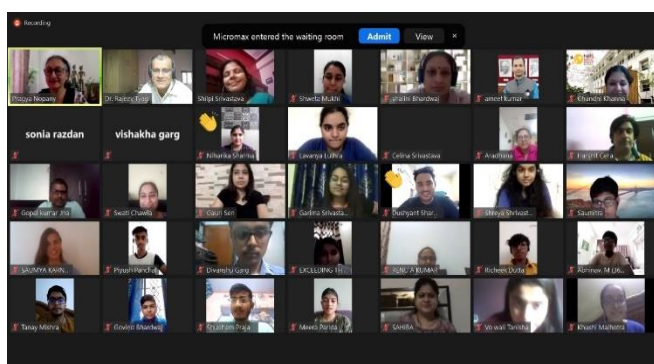
Attended By: 1. Ms Sunita Kandpal
2. Richeek Dutta XII J
3. Asmit Agarwal XII I

A workshop, **Komorebi II- interplay of activities and ideas in optics**, organised by **BVN-IAPT Anveshika**, was attended by a teacher from Physics department (Redshift in- charge) and two members (Presidents of the club), on 3rd September 2020. The workshop was conducted by renowned educator **Dr Rajeev Tyagi**, who is an expert at designing excellent demonstrations with deep insight into physics.

The Japanese word 'Komorebi' refers to the interplay of light and leaves when sunlight filters through trees. Through the interplay of activities and ideas, the workshop aimed to ignite critical thinking with an appreciation for patterns in nature, and it would be an understatement to say that it succeeded in its objective. This workshop reignited curiosity and love for physics.

It was a practical based workshop which taught the participants about the various behaviors of light, not through text books, but through real time experiments using things that can be easily procured. This workshop also encouraged teachers and students to try out these experiments at home so that they could independently verify these characteristic behaviours of light. Teachers and children were engaged in brain

storming sessions based on the activities shown. This did not just help everyone present in having better understanding of the various concepts but also made the session interesting.



Month: September

Activity: Session on the topic ‘General Theory of Relativity’

Classes involved: IX, XI and XII

Platform: Google Meet

Duration: 1.5 hr

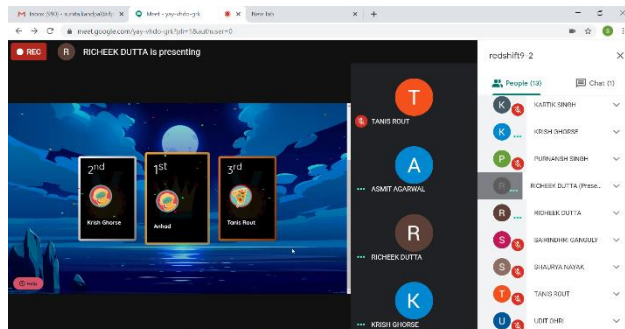
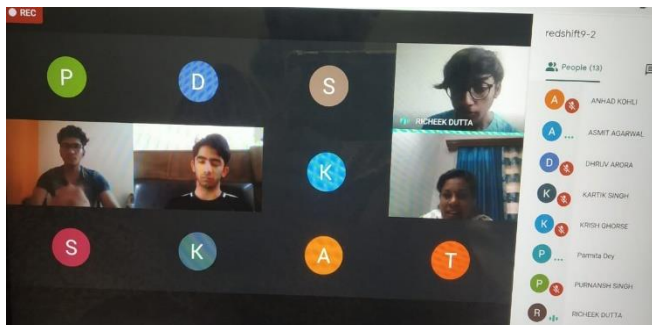
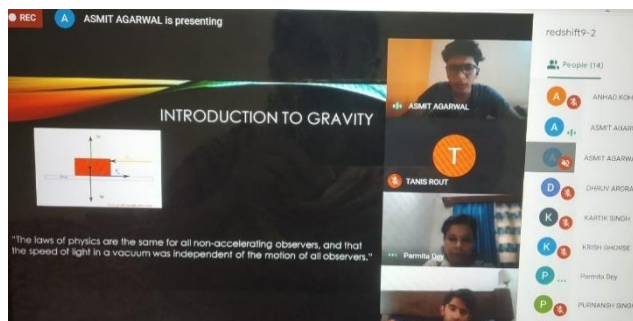
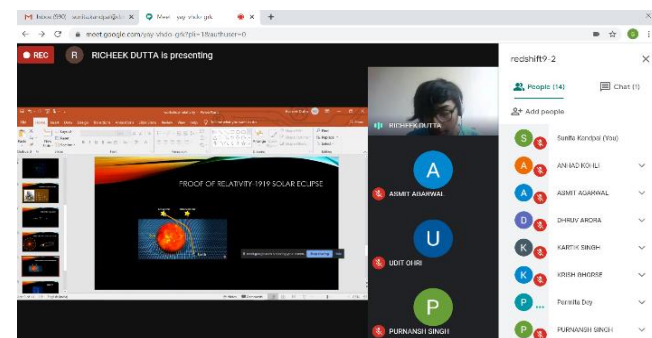
Resource Person: 1. Asmit Agarwal XII I (President- Redshift)
2. Richeek Dutta XII J (President- Redshift)
3. Udit Ohri XI I (Secretary- Redshift)

The Redshift club conducted their second student led virtual session on the topic, ‘**General Theory of Relativity**’ for its members of class IX, on 4th September’20. A total of 12 students along with the teacher in-charge, attended the session from 3:30 pm to 5:00pm on Google Meet.

The session essentially consisted of 5 parts: Introduction to Gravity (Newtonian gravity), Einstein's Thought Experiment, Basics of Relativity, Applications and Implications (time dilation, Mercury's orbit, black holes, redshift and blueshift of light) and a quiz at the end.

It was an interactive workshop. It was wonderful to see class IX students familiar with most parts of such vast topic as they asked their queries. Overall, it was a fruitful experience for all.

The session ended with the students giving their feedback and suggestions for the future workshops.



Month: September

Activity: Session on the topic 'Decoding Mystery of Foucault's current'.

Classes involved: X and XII

Platform: Google Meet

Duration: 1.5 hr

Resource Person: 1. Ms Sunita Kandpal, Ms Parmita Dey

2. Swastika Thakur XII J

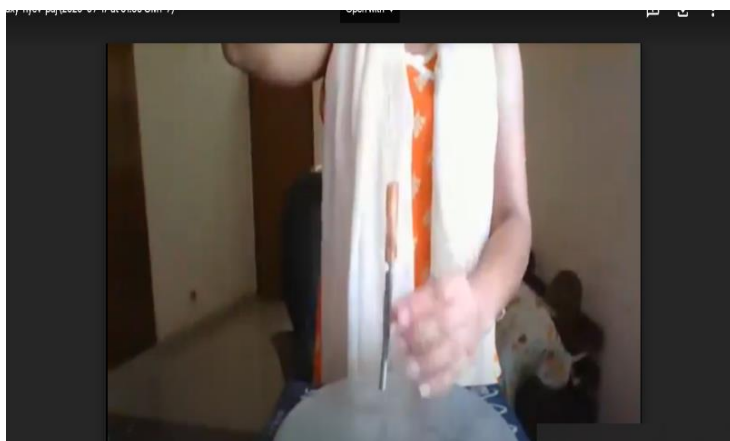
3. Akanksha Sarkar XII I

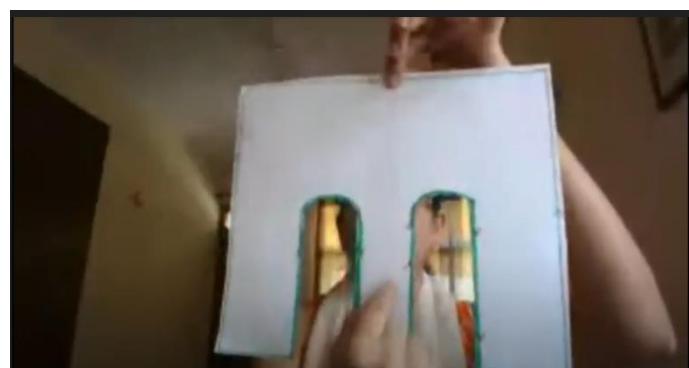
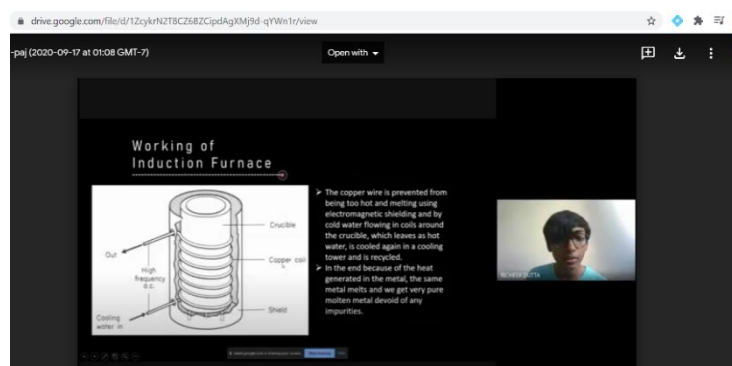
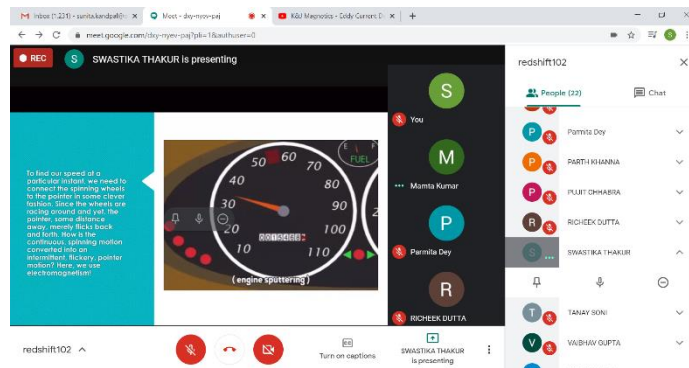
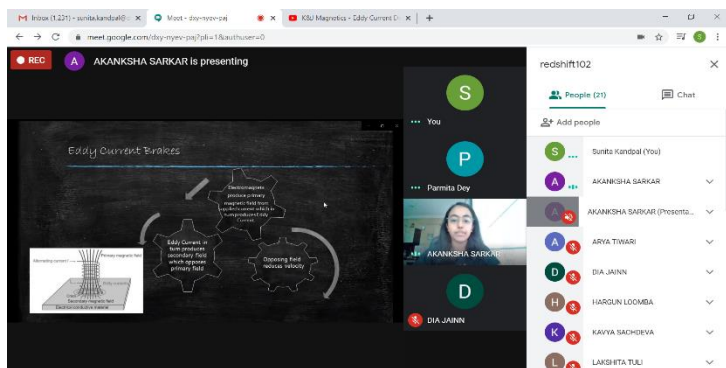
4. Tanay Soni XII H

5. Richeek Dutta XII J

To encourage the spirit of physics amongst students the second workshop of Redshift Club was conducted on 17th September 2020 for its members of Class X on the topic '**Decoding Mystery of Foucault's current**'. The session gave children a broader view on the topic 'Magnetic field and current. The session started with an activity on Eddy Currents and later the applications of Eddy currents were explained by class XII members. A quiz was also conducted at the end of the session.

Children thoroughly enjoyed the workshop. All the students attended the workshop keenly and participated actively.





Month: September

Activity: Session on the topic 'Astronomy'.

Classes involved: IX and XI

Platform: Google Meet

Duration: 1.5 hr

Resource Person: 1. Ms Sunita Kandpal, Ms Parmita Dey

2. Udit Ohri XI I

3. Arshia Dang XI H

4. Shreedar Goyal XI K

5. Vinayak Trivedi XI K

6. Vansh Verma XI G

The Redshift club conducted their third virtual session on the topic, '**Astronomy**' for its members of class IX on 25th September'20. A total of 16 students along with the teacher in-charge, attended the session from 1:30 pm to 3:00pm on Google Meet.

The session started by showing a simple **Scale Model of the Solar System** using dough. Students of class XI covered the topics like Expanding universe, Hawking Radiation, Solar system, Parallax, Quasars and Pulsars, during the session. A quiz was also conducted which children enjoyed a lot.

The session ended with the students giving their feedback and suggestions for the future workshops.

