

## IETE STUDENTS' FORUM BIT SINDRI



# CONSTRUE WHAT YOU PERCEIVE

RULEBOOK

## **ABOUT**

XPLICAR is a one-day fun tech event that tests a person's understanding of the scientific concept used in a certain scene of a science fiction (Sci-Fi) movie/series/anime like Interstellar, Tenet, Avengers, The Expanse, Dark, Steins, etc. It's a fiesta for the lovers of Sci-Fi genre.

The participants can mention any of their favourite **scientific concepts** applied to the various scenes of movies or series. They'll be explaining the concept briefly, adding upon, they may also choose an **equation** which satisfy the concept.

### SAMPLE ILLUSTRATION

Movie: - Interstellar

Scene: -

When Cooper and his crew landed in the spaceship on Miller's planet, they clearly stated that Miller's planet has a 130% higher gravitational force than the earth, and 1 hour here would be seven years on earth. The reason for high gravitational force is that Miller's planet was closer to Gargantua Black Hole. As mentioned above, closer to black holes, there's a significant slowdown in time due to very high gravitational force in a singularity.

### Concept: -

Time dilation is a **difference in the elapsed time measured by two clocks**, either due to them having a velocity relative to each other, or by there being a gravitational potential difference between their locations.

The equation for time dilation is =  $t = t_0/(1-v^2/c^2)^{1/2}$ 

### **PARTICIPATION CRITERIA**

The event is open for all the college students regardless of any batch or any college.

### **GENERAL RULES**

- There is no any need of registration. For participating one can directly comment on the post abiding all the rules.
- The event will only be featuring on our official <u>Facebook</u> page. All the updates about results will be available on the same.
- The decision of the organizers and judges will be treated as final and binding on all.
- No responses will be held by IETE Students' Forum, BIT Sindri for any late or misdirected entries.
- The participant needs to wrap up the comment in **100-150** words.
- The event will start right at 6 pm on December 1 and will be ending the next day on same time.

### **JUDGING CRITERIA**

The comments will be judged based on creativity in expressing the concepts, equations, and logic behind it and the error-free composition of the scene.

The Judging Criteria will be:

- Content and Presentation: 30% (The scientific concepts and equations used should be valid.)
- Likes on the comment: 30% (The participant and one who likes the comment must follow the official Facebook page of the IETE Students' Forum. The likes on the comment will only be counted if the person is following the page.)
- Tagging of friends: 30% (The participant needs to tag at least 3 friends and at most 5. The tagged friends replying to the comments with valid points and views will add on to the points. The participant may also tag or mention the Facebook page that contains information related to the movie.)
- Sharing of the post: 10% (The participant needs to share the Event post on their timeline.)

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