

## Scientists on Life and Learning:

### What advice would you give your younger self?

Listen, kid, I know you think you're going to solve the mysteries of the universe before your hair turns wild and grey, but let's be real. You'll spend most of your time debugging code and re-plotting data than figuring out the origin of dark matter. And that's okay. The real joy is in the long, unglamorous hours spent waiting for the cirrus clouds to clear before you can resume your photometry. Don't be so afraid of making mistakes—each mistake helps you learn something new. And spend as much time as you can with your family and friends. You'll thank me later.



Somak Raychaudhury  
Vice-Chancellor, Ashoka University

## Weather Forecast



Max:

29°C / 84.2°F

Min:

24°C / 75.2°F

Mumbai

Generally cloudy sky with heavy rain

Source: India Meteorological Department

## Today's Programme



### Students

09:30 hrs - 16:00 hrs

Planetarium Exam (in batches)

Venue: Nehru Planetarium



### Leaders

09:00 hrs - 13:00 hrs

IBM (organisational)

Venue: Astor Ballroom



17:00 hrs - 20:00 hrs

Cultural Night & Common Dinner

Venue: Grand Ballroom, Westin

Image Credit: AI Generated

## Today's Attraction ★

### After the Exams: A Night of Celebration, Culture, and Connection!



Once all the exams are done, it's time to unwind and soak in the spirit of togetherness. We've put together a vibrant lineup of Indian folk arts and crafts—try your hand at *henna* art, pottery making, *diya* painting, lacquer bangle making, and much more. You'll also get to see and shop a beautiful display of Indian handicrafts made from traditional fabrics like *Bandhani*, *Ikatt*, and *Madhubani*, a true celebration of India's rich textile heritage.

We also look forward to some impromptu performances by you—our talented contestants. Whether you want to dance, sing, or play an instrument, this is your moment to shine! And to close the evening, we'll turn up the international and Indian (*desi*) beats and open the dance floor for a true reunion celebration, complete with a sumptuous meal to match.

## Mission: You Got This



Don't stress, don't fret, just look to the night,  
The stars are calm but shine with light.  
With telescope in hand, take your time,  
Each step you take is yours to climb.

The moon and planets don't chase,  
They glide through space at their own pace.  
If you lose your way,  
Just breathe, reset, and seize the day.

You've studied hard, you know your stuff,  
So shine like stars, bright and tough!



## This Day, That Year

### 18 August, 1868: Solar Prominences are First Studied with a Spectroscope

Sir Norman Lockyer first observed helium in the Sun's spectrum and gave it its name. At the time, helium was unknown on Earth and wasn't discovered here until 1895, when it was found in the uranium ore cleveite as a radiogenic product of uranium decay. Lockyer's observation marked the first discovery of an element in space before it was found on Earth. Pierre Jules César Janssen also independently observed the same spectral line, but only Lockyer proposed it was a new element and named it after the Sun.

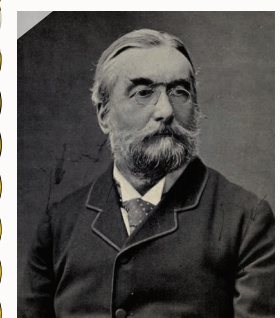
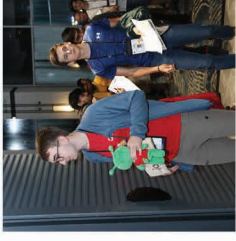
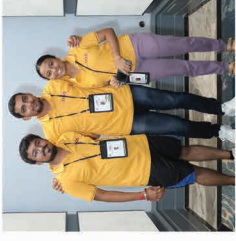
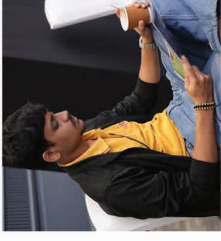
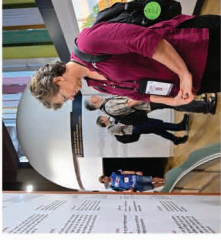
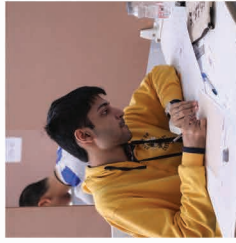
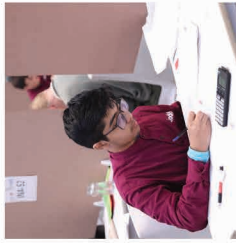


Image Credit: Wikimedia Commons/ Public Domain







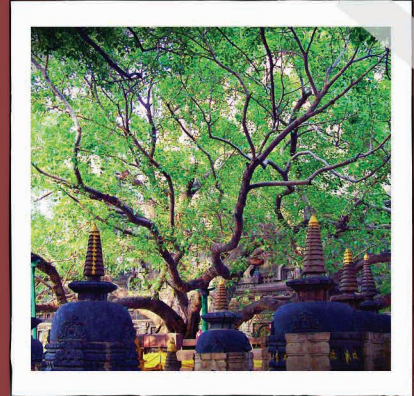


## In the Shades of the Bodhi Tree

The Bodhi tree in Bodh Gaya, a place in the state of Bihar in India, refers to the tree under which Gautama Buddha meditated and attained enlightenment. Buddha and Buddhism exemplify India's rich and deep-rooted philosophical heritage. The term 'Buddha' has its roots in the Sanskrit word *budh*, which means 'to awaken' or 'to know.' Correspondingly, the title 'Buddha' means 'the awakened one' or 'the enlightened one.'

Buddhism comprises a rich and complex system of thought that continues to inspire millions of people around the globe. Cognitive science, particularly the embodied cognition perspective, draws heavily from Buddhism. Embodied cognition maintains that cognitive processes are deeply rooted in the body's interaction with the environment, strongly resonating with the Buddhist ideals of the interconnectedness of body and mind. Buddhism also stands out for its transformative potential, inspiring social and environmental movements geared toward equity, justice, and sustainability.

Image Credit: Wikimedia Commons/ Bholi.aman/ CC4



The mighty Peepal tree at Bodh Gaya, where Lord Buddha attained enlightenment.

## In Their Own Words



### Stereotype debunk

Usually, people say that Czechs aren't very friendly, which can sometimes be true and give a certain impression. But when you actually talk with them, you discover a very different side—a warmer, more welcoming impression.

**Radomír Mielec**  
(Observer, Czechia)

There is this prejudice that Germans are always very punctual, but if you have been to Germany and used the German train system, you will know that no one there is punctual!

**Jonathan Gräfe**  
(Leader, Germany)

Colombia is often seen as a mafia country, but that is not the reality.

**Mateo Pirela Pulido**  
(Contestant, Colombia)

### What caught your attention?

I was surprised by how familiar the feeling of taking the train during rush hour was. It turned out to be quite a nice experience—I took a local train from Lower Parel to just two or three stations ahead.

**Raphael Zumbrunn**  
(Leader, Switzerland)

India has many different sides—just like Bolivia—in its nature, culture, and history. And there are also so many young people and children.

**Juan Terrazas Vargas**  
(Leader, Bolivia)

It's my first time in India, and I'm seeing such a wide variety of everything—small buildings and large ones, poor people and rich people, good weather and bad weather.

**Grzegorz Kondrat**  
(Leader, Poland)



**Tomas Graf**  
Leader, Czechia

**Faiz Haydar Akmal**  
Contestant, Indonesia

I mostly liked all types of sweets, but the mango mousse in particular was soooo good!

**Leyli Mametamanova**  
(Contestant, Turkmenistan)

The grading experience has been great. I feel questions are quite unconventional and interesting and have been kept relevant to the progressing field of astronomy and astrophysics.

**Faraz Ahmed Siddiqui**  
(Member, Academic Team)

### Words you have learnt







## Seetha Somasundaram

If you're dreaming of exploring the universe, meet Seetha Somasundaram, an Indian astronomer who helped India and women defy "gravity" through her work at the Indian Space Research Organisation (ISRO). Until a few years ago, she was the Space Science Lead at the U.R. Rao Satellite Centre, ISRO, steering exciting cosmic adventures.

One of her greatest achievements: AstroSat—India's first multi-wavelength space telescope, launched in 2015. Thanks to Seetha, AstroSat doesn't just stare at space, it studies the universe in ultraviolet, X-ray, and optical light all at once! AstroSat has spotted everything from black holes to star clusters, and even a pair of binary stars where one acts like a "vampire," stealing material from its partner! Her research on variable stars, stars that change brightness in dramatic ways, has added to our understanding of the cosmos. Seetha is also a whiz at building instruments that help us decode space secrets. She also provided leadership in making tools for spotting gamma-ray bursts, scanning the sky for X-rays, and *Mangalyaan* (India's first Mars mission) making all these a huge success.



As part of the IOAA 2025 outreach initiative, Dr. Aniket Sule, President of the IOAA, delivered an engaging talk titled "Bridging Minds Through Stars" at TIFR's *Chai and Why* series held at Ruparel College, Mumbai. Alongside, we showcase one of the winning entries from "Stellar Stories", a nationwide astronomy comics competition held for school children.



### IOAA 2025 Outreach



Laya Hariharan, Orchids International School (Karnataka)

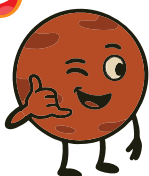
### Lines Across the Stars

You are given a star map having 10 stars, represented as dots scattered randomly across space.



Use exactly 4 straight lines to divide the space into 10 separate regions, so that:

- Each region contains exactly one star.
- Lines may be in any orientation—horizontal, vertical, diagonal, etc.—but must be straight and continuous.
- No curved, overlapping, broken or bent lines.



What did Mars say to Saturn?

Give me a ring sometime!

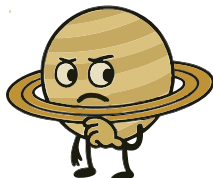


Image by: Dev Verma

### Hot Takes for a Hotter Earth

Those who have done the least to cause the climate crisis are suffering its worst consequences.

