

# **INDIAN SPACE SCIENCE OLYMPIAD (ISSO) - 2025**

# FINAL LEVEL OFFLINE WORKSHOP & EXAMINATION INSTRUCTIONS

The final level of Indian Space Science Olympiad (ISSO) will comprise a 3-day offline workshop and examination. Candidates who are eligible to attend the final level offline examination can register through <a href="https://www.spaceolympiad.com">www.spaceolympiad.com</a>.

Event Dates: 27, 28 & 29 DECEMBER 2025

Reporting time: 08.30 AM on 27th December 2025

#### Venue of final event and exam:

Day 1 and Day 2 (27<sup>th</sup> & 28<sup>th</sup> December 2025): A V Rama Rao Auditorium, New Chemical Sciences Building, IISc Bangalore

Day 3 (29<sup>th</sup> December 2025): **JN Tata Auditorium, National Science Seminar Complex, CV Raman Rd, Bangalore** 

#### **Overview of the Venue:**

The **Indian Institute of Science (IISc)** is a premier public research university located in Bengaluru, Karnataka. Established in 1909, IISc is renowned for its contributions to science and engineering research and education. The institute offers a range of undergraduate, postgraduate, and doctoral programs across various scientific disciplines.

**Location**: IISc is situated in the heart of Bengaluru, on a sprawling 400-acre campus. The institute's address is:

Indian Institute of Science (IISc)
C.V. Raman Avenue,
Bengaluru - 560 012,
Karnataka, India

#### Reachability to the Venue:

#### By Air:

The Kempegowda International Airport (BLR) is approximately 35 kilometers from the IISc campus. Travel time by taxi or airport shuttle is typically 45 minutes to 1 hour, depending on traffic conditions.

# By Train:

- **Bengaluru City Railway Station (SBC):** About 7 kilometers from IISc. You can reach the campus via taxi, auto-rickshaw, or local bus services.
- Yesvantpur Jn Railway Station (YPR): Located less than 2 kilometers from the IISc campus. It is a convenient option for those traveling from this station, with taxis and auto-rickshaws readily available.

# By Bus:

Bengaluru's BMTC (Bangalore Metropolitan Transport Corporation) bus network offers extensive connectivity throughout the city. Several bus routes service the IISc area. The nearest BMTC bus stop is located on the IISc campus or nearby on C.V. Raman Avenue.

# **Accessibility:**

The IISc campus is accessible to visitors with proper identification.

#### **GENERAL INSTRUCTION**

- This program is structured with a defined schedule, rules, and decorum. It is not a luxury camping holiday.
- All candidates must report to the venue on time.
- Candidates must carry their original school ID card, Aadhaar card, or a Bona Fide certificate with a photograph.
- Candidates are not allowed to leave the venue without prior permission from the Camp Director. Any violation will result in immediate expulsion.
- Gadgets such as mobile phones and laptops are permitted at the venue but must be left in designated areas during examinations. This includes smartwatches.
- Candidates must remain in the exam hall until the end of the session.
- The examination will be OMR-based with 50 multiple-choice questions. Use a black or blue ballpoint pen to mark answers, and ensure the OMR sheet is undamaged and properly filled out.
- Any form of malpractice will result in disqualification.
- Parents must inform the registration desk if their child is on any medication. All medicines should be in their original containers.
- Parents must provide two contact numbers at the registration desk.
- Edu Mithra will NOT provide or arrange accommodation/stay for students and parents.
- On the 27th, parents should drop off their child at 8:30 AM and pick them up at 7:30
   PM at the A V Rama Rao Auditorium, New Chemical Sciences Building, IISc Bengaluru.
- On the 28th, parents should drop off their child at 8:30 AM and pick them up at 8:00
   PM at the A V Rama Rao Auditorium, New Chemical Sciences Building, IISc Bengaluru.

- On the 29th, parents should drop off their child at 9:30 AM and pick them up at 6:00 PM at the JN Tata Auditorium, IISc Bengaluru. Parents are also welcome to join the prize distribution and closing ceremony from 2:00 PM to 6:00 PM.
- Unauthorized photography is prohibited during competition hours.
- Edu Mithra is not responsible for any costly belongings of the candidates.
- Participants must wear the ID cards provided to them throughout the Olympiad.
- Dress Code: Formal attire is required.
- Participants under the influence of drugs, alcohol, or other inappropriate substances will be expelled immediately.
- Candidates must maintain decorum and discipline on campus.
- Edu Mithra or IISc staff will not request any additional fees beyond the registration fee. Report any such incidents to the event director immediately.
- The organizers reserve the right to use photographs and videos taken during the competition for advertising, promotion, trade, or artistic purposes. If you do not consent to the use of your photos, please refrain from participating when Edu Mithra is taking photographs.
- Lunch (vegetarian/non-vegetarian) and snacks will be provided to candidates only.
- A water bottle will be included in the welcome kit.

# Safety at the Camp

- Campers are supervised throughout the day to ensure safety.
- Staff continuously monitor the campsite for potential hazards. Safety is our top priority, and all activities are conducted with safety in mind.
- Each camper will receive an ID card with emergency contact information, including the Camp Director's number and the local sub-inspector's number.
- Our experienced team maintains an excellent safety record. First-aid and common medications are available on site. Hospitals are within a 10-15 minute distance.

## **FEE DETAILS**

ISSO Final Level Workshop and Exam Registration Fee: INR 10,000 (Excludes Lunch & Snacks) Lunch and Snacks: INR 1,250 (can be paid one month prior to the event)

# **IMPORTANT NOTE**

## **Registration Process for Final Examination**

## 1. Registration Closure:

 The registration process will be permanently closed once the number of registered students in each category reaches 200.

# 2. Eligibility for Final Examination:

- Candidates who are in the status column showing "Eligible to attend Final Level
   Offline Workshop & Exam" are eligible to register for the Final Examination.
- Candidates not in this eligible list but who have cleared the examination will be placed on Waiting List 1 or Waiting List 2.

# 3. Top 200 Registration Deadline:

- Eligible candidates must register for the Final Examination by 5:00 PM on 08<sup>th</sup>
   October, 2025.
- Candidates who fail to register by this deadline will have their candidature cancelled without prior notice and the top scorer from Waiting List 1 will be moved into the eligible list.

# 4. Waiting List Registration:

#### Waiting List 1:

- If any of the TOP 200 candidates do not register for the Final Examination by the deadline, the top scorer from Waiting List 1 will be moved into the Eligible List.
- Waiting List 1 candidates will have the opportunity to register from October 09 to October 15, 2025, if they are moved into the Eligible List.

# Waiting List 2:

- After October 15, any remaining slots will be filled with candidates from Waiting List 2.
- Waiting List 2 candidates will be considered for registration from October 16 to October 20, 2025.

Last Date of registration: 08<sup>TH</sup> OCTOBER 2025 visit <u>www.spaceolympiad.com</u> for registration



# INDIAN SPACE SCIENCE OLYMPIAD 2025 PROGRAM SCHEDULE

# Day 1 - 27.12.2025

Venue: A V Rama Rao Auditorium, New Chemical Sciences Building, IISc Bangalore

Time	Activity	Details	
8:30 AM – 09:30 AM	Reporting Time and Registration		
09:30 AM – 10:30 AM	Ice Breaking		
10:30 AM – 11:00 AM	Tea Break		
11:00 AM – 1:00 PM	Session 1 (Based on syllabus)	Speaker: Ms. Sruthy K S, Science Communicator and Relativistic Astrophysicist	
1:00 PM – 2:00 PM	Lunch Break		
2:00 PM – 4:00 PM	Session 2 (Based on syllabus)	Speaker: <b>Mr. Manosh T M</b> , Science Communicator and PhD Scholar at Cochin University of Science and Technology -CUSAT (Cosmology)	
4:00 PM – 4:30 PM	Tea Break		
4:30 PM – 6:00 PM	Invited Talk	Speaker: <b>H N Suresha Kumar</b> , Former Deputy Director, URRao Satellite Centre and Former Deputy Project Director, Deployment Mechanisms for Chandrayaan-1, Chandrayaan-2 Orbiter, GSAT-17 & GSAT-18 spacecraft missions – ISRO.	
6:00 PM – 7:30 PM	Astro Speaker: Mr. Sarath Prabhavu, Science Communicator and Astrophotographer Photography Workshop		

# Day 2 - 28.12.2025

Venue: A V Rama Rao Auditorium, New Chemical Sciences Building, IISc Bangalore

Time	Activity	Details
8:30 AM – 09:00 AM	Reporting Time	
9:00 AM – 11:00 AM	Session 3 (Based on syllabus)	Speaker: Mr. Athul R T, Data Scientist & Researcher
11:00 AM – 12:00 PM	Tea Break and Preparation Time	
12:00 PM – 1:30 PM	OMR Exam (50 MCQ)	Duration: 1 Hour
1:30 PM – 2:30 PM	Lunch Break	
2:30 PM – 4:30 PM	Invited Talk	Speaker: <b>Dr. N Shaji</b> , Adjunct Faculty, Department of Physics, Cochin University of Science and Technology (CUSAT) and Former Principal, T. M Jacob Memorial Government College.
4:30 PM – 5:00 PM	Tea Break	
5:00 PM – 6:30 PM	Invited Talk	Speaker: <b>Dr. B R Guruprasad</b> , Distinguished Scientist & Director of the Jawaharlal Nehru Planetarium & Former Associate Director for Media & Public Relations at ISRO
6:30 PM – 8:00 PM	Sky Watching and Star Hunting	

# Day 3 - 29.12.2025

Venue: JN Tata Auditorium, National Science Seminar Complex, CV Raman Rd, IISc Bangalore

Time	Activity	Details
10:00 AM – 11:00 AM	Career in Space Science & Technology	Discussion
11:00 AM – 11:30 AM	Tea Break	
11:30 AM – 1:00 PM	Invited Talk	Speaker: <b>Dr. Umamaheswaran</b> , Distinguished Scientist & Former Director of HSFC, ISRO
1:00 PM – 2:00 PM	Lunch Break	
2:00 PM – 6:00 PM	Prize Distribution and Award Ceremony	Title Winner will be awarded a Newtonian Parabolic Mirror Telescope – a true symbol of curiosity and discovery in space science. This grand finale promises to be a moment of pride and inspiration, as parents are warmly invited to witness their young achievers being honoured on stage.
6:00 PM	National Anthem	

#### **DISCLAIMER**

The Indian Space Science Olympiad (ISSO) 2025 is solely organized and owned by Edu Mithra Intellectual Services Pvt. Ltd. The A. V. Rama Rao Auditorium and J. N. Tata Auditorium serve only as venues. The Indian Institute of Science (IISc) and its auditorium management have no role or rights in organizing, endorsing, or conducting ISSO, either now or in the future. All rights to ISSO's concept, brand, and future events remain the exclusive property of Edu Mithra.

#### **CODE OF BEHAVIOUR**

All participants are required to maintain acceptable behavior at all times during Edu Mithra's Indian Space Science Olympiad, including outside official event hours. This includes respectful interactions with other members, trainers, guests, faculty, and staff. Unacceptable behavior, such as verbal or physical abuse, deliberate damage or danger to others, will result in immediate removal from the program without any refund.

#### **FORCE MAJEURE**

Edu Mithra will not be liable for any failure to perform any program due to unforeseen circumstances beyond its reasonable control. This includes, but is not limited to, acts of God, war, riots, embargoes, civil or military authorities' actions, natural disasters, accidents, labor disputes, service interruptions, communication failures, or shortages of critical materials.

#### **CAMP VISITOR POLICY**

Visitors are strictly prohibited during camp days. Candidates may bring smartphones to contact their parents during designated free times as outlined in the program schedule.

#### **COMPLAINTS**

Complaints that cannot be resolved between the student and instructor or Edu Mithra staff during the event should be mailed to:

#### **Edu Mithra Intellectual Services Pvt. Ltd**

2<sup>nd</sup> Floor, Palm Arcade, Vazhakkala, Kochi, Kerala, India - 682030

All disputes related to this event will be subject to the exclusive jurisdiction of the courts of Ernakulam, Kerala, India.

For further assistance, please call +919446321098 between 9 AM and 5 PM or email to info@edumithra.com.

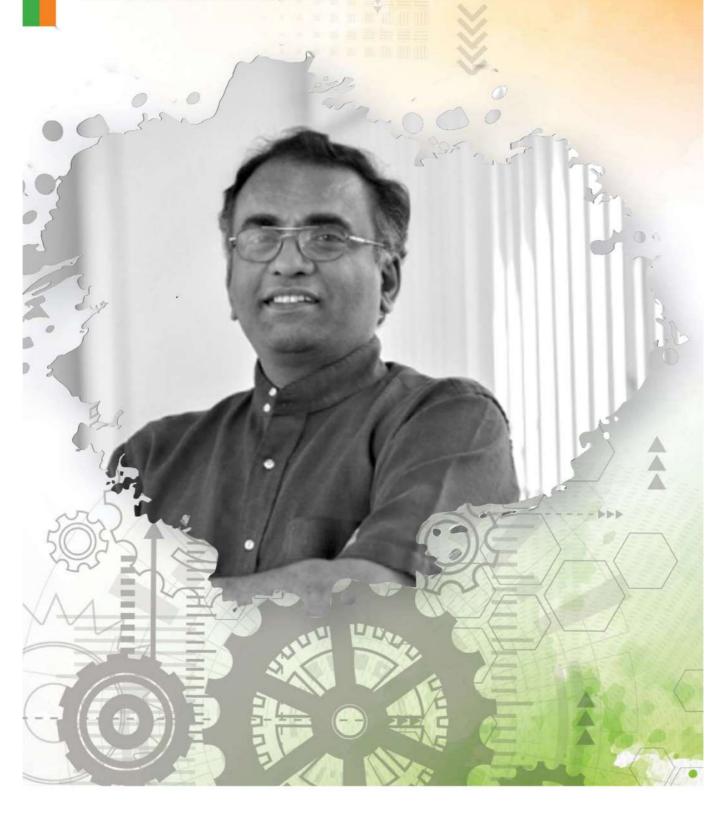
Delighted to introduce the profiles of our respected faculties and invited speakers below.



Meet the leading experts in space science and technology who are shaping the future of India's space exploration.



Distinguished Scientist and Former Director of HSFC, ISRO





mamaheswaran R, born on May 20, 1963, completed his B-Tech in Electronics & Communication Engineering from College of Engineering, Trivandrum, a Master's in Software Systems from BITS, Pilani, and a Ph.D. in Electronics & Communication from the National Institute of Technology, Tiruchirapalli. He also holds a Master's degree in Russian Language from Kerala University. His

professional interests include launch vehicle technology, program management, science and technology policies, and space policy planning.

Dr. Umamaheswaran has been with the Indian Space Research Organisation (ISRO) for nearly 35 years. At Vikram Sarabhai Space Centre (VSSC), he served for 31 years in various roles, including Project Director of GSLV from July 2014 and Deputy Director of VSSC Avionics from May 2017. He was Associate Scientific Secretary of ISRO from May to August 2018 and subsequently became the Scientific Secretary of ISRO. He assumed the role of Director of the Human Space Flight Centre in Bangalore on March 3, 2022.

Significant contributions include drafting the Space Activities Bill and sectoral reforms toward the Atmanirbhar Bharat vision. He chaired the High-Level Interim Committee to implement space sector reforms, enhancing private sector participation. His efforts facilitated private industry access to ISRO facilities, introduced a national registration mechanism for Indian space objects, and enabled the launch of four student satellites in PSLV.

Dr. Umamaheswaran has been a key player in ISRO's international cooperation, co-chairing Joint Working Groups with space agencies such as ROSCOSMOS (Russia), JAXA (Japan), ESA (Europe), NSSA (Bahrain), CRTS & CRERS (Morocco), ASAL (Algeria), CONAE (Argentina), MDAI (Kazakhstan), and EgSA (Egypt). He represented India in the UNCOPUOS meeting (June 2019) and led the ISRO delegation at APRSAF 2020. As Chair of the Working Group on Long-Term Sustainability of Space Activities in UNCOPUOS, he is working with UN member countries on international guidelines for the sustainability of outer space activities.

During his tenure at VSSC, Dr. Umamaheswaran played a crucial role in system integration, checkout, and avionics for

ISRO's PSLV, GSLV, and GSLV-Mk III launch vehicles. Notably, he was Chief Designer (Integration) for major subassemblies and mission-critical circuits. He achieved success as Mission Director for three successive GSLV missions and as Vehicle Director for the GSLV D5/GSAT-14 Mission with the indigenous cryo stage. As Deputy Director of the Avionics Entity, he led the development of miniaturized avionics and Electro Mechanical Actuation Systems.

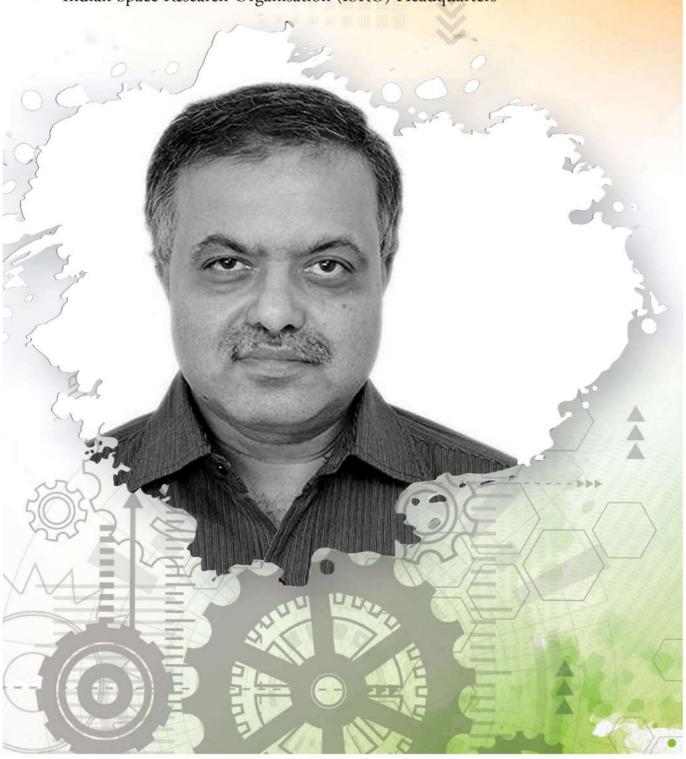
He is a member of several national and international bodies, including the Board of Trustees of the International Academy of Astronautics (IAA) and the IN-SPACe Board. He has held roles such as Chair of the Programme Review and Advisory Committee (PRAC) at the Centre for Nano Science and Engineering (CeNSE), IISC, and Co-Chair of the Joint Policy Committee of ISRO-IIT-B Space Technology Cell.

Dr. Umamaheswaran's accolades include the ISRO Individual Merit Award (2013), ISRO Team Awards (2006, 2014), ISRO Outstanding Achievement Award (2018), ASI-ISRO Award (2016), and honorary degrees from Sathyabama Institute of Science and Technology (2019). He also received the Dr. Biren Roy Space Science and Design Award from the Aeronautical Society of India (2019).

On March 3, 2022, he took charge as the Director of the Human Space Flight Centre in Bangalore



Director, Jawaharlal Nehru Planetarium, Bengaluru & Scientist 'SG'/ Associate Director, Office of Media and Public Relations, Indian Space Research Organisation (ISRO) Headquarters





**Dr. B. R. Guruprasad** is an eminent scientist and science communicator, currently serving as the Director of the **Jawaharlal Nehru Planetarium**, **Bengaluru**. With nearly 37 years of service at the **Indian Space Research Organisation (ISRO)**, he retired in 2020 as Scientist 'SG'/Associate Director of Public Relations at ISRO Headquarters. He has contributed to over 25 Indian satellite missions

at the U. R. Rao Satellite Centre and has also worked with **DLR (Germany)** and **NASA (USA)**. His expertise extends to space education,

international collaborations, and science communication, for which he has been invited by leading global agencies such as **JAXA** (**Japan**) and CNES (France).

A prolific writer and broadcaster, Dr. Guruprasad has authored 13 books on astronomy and space, with one translated into 11 Indian languages including Sanskrit. He has published more than 600 articles in English and Kannada on science, travel, and exploration, and delivered over 700 lectures worldwide. His engaging presence in the media includes more than 100 science programs on All

Over 37 years in ISRO and beyond, inspiring curiosity through satellites, books, lectures, and media.

India Radio, Doordarshan, and private TV channels, along with live commentaries on landmark missions such as Chandrayaan-3 and Aditya-L1. Beyond media, he has organized 600+ ISRO exhibitions, 150+ quiz programs, and numerous hands-on workshops, making science accessible to students, teachers, and the general public.

Passionate about inspiring young minds, Dr. Guruprasad has conducted large-scale outreach initiatives, including a state-level science quiz in Kannada that engaged over **8,000 students** across Karnataka. His academic journey includes a **PhD from Mysore University** for his research on the evolution of India's space capabilities. Recognized as a dynamic communicator bridging science and society, Dr. Guruprasad continues to ignite curiosity about the cosmos while nurturing the next generation of explorers.



Former Deputy Director
URRao Satellite Centre, Bangalore.





**Sri. H. N. Suresha Kumar** is a distinguished aerospace scientist with over three decades of contributions to India's space program. A postgraduate in Mechanical Engineering, he joined the **Indian Space Research Organisation (ISRO)** in 1988 and went on to play a pivotal role in the design, analysis, and testing of spacecraft deployment mechanisms. Rising

through the ranks, he served as Project Manager, Deputy Project Director, and

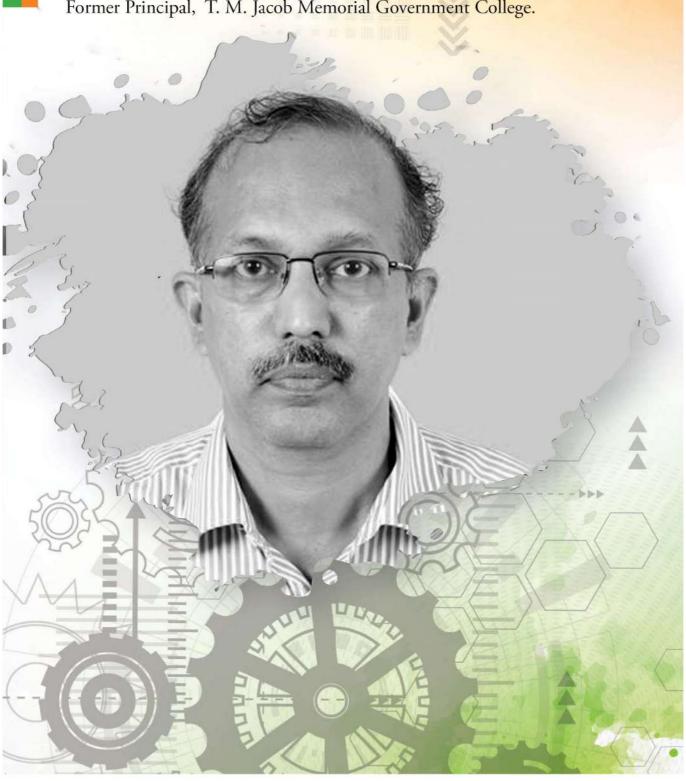
later as Group Director of the Spacecraft Mechanisms Group before retiring as Deputy Director, Mechanical Systems Area at U R Rao Satellite Centre in 2023. His leadership was instrumental in the success of landmark missions such as Chandrayaan-1, Chandrayaan-2, Chandrayaan-3, Aditya-L1, GSAT satellites, and the SPADEX docking mission.

Beyond his technical achievements, Sri Suresha Kumar has nurtured innovation, guided young engineers, and fostered academia—industry collaborations. He holds A visionary ISRO scientist who shaped India's landmark space missions, from Chandrayaan to Aditya-L1, with over 35 years of pioneering

nine patents, has co-authored over 65 research publications, and received the INSARM Outstanding Achievement Award for his pioneering work in aerospace mechanisms. An avid HAM radio operator (VU2HNS), he has inspired students through workshops on satellite tracking and space sciences. Post superannuation, he continues to contribute to academia and space startups, carrying forward his passion for advancing India's frontiers in space technology.



Adjunct Faculty, Department of Physics, Cochin University of Science and Technology (CUSAT) Former Principal, T. M. Jacob Memorial Government College.





**Dr. N. Shaji** is a physicist, academic, and passionate science communicator who has dedicated over three decades to research, teaching, and public engagement in science. He retired as Principal of T. M. Jacob Memorial Government College, after a distinguished career in higher education, and is **currently serving as Adjunct Faculty in the Department** 

of Physics at Cochin University of Science and Technology (CUSAT).

He obtained his Ph.D. in Physics from the Institute of Mathematical Sciences (IMSc), Chennai, specializing in quantum field theory. His research interests continue to span frontier areas such as quantum information theory, weak measurements, and the control of decoherence.

Dr. Shaji is also well known as a prolific science writer and communicator. As the former editor of *LUCA*, a science magazine, he has played a key role in making complex

Dr. N. Shaji

- where
cutting-edge
physics meets a
lifelong passion
for science
communication.

scientific ideas accessible to the public. He has conducted thousands of skywatching programs across Kerala and South India, inspiring countless students and enthusiasts to explore the wonders of astronomy. His ability to engage audiences and spark curiosity has made him one of Kerala's most active voices in science communication.

Respected for his humility and admired for his passion for teaching, Dr. N. Shaji continues to influence and inspire through his writing, research, and outreach. His life's work reflects a deep commitment to both advancing scientific knowledge and nurturing a culture of scientific temper in society.



Science Communicator &
Phd Scholar at Cochin University of Science and Technology (CUSAT)





anosh T. M. (Manosh Tharayilparambil Manoharan) is a passionate researcher and Ph.D. student at the Department of Physics, Cochin University of Science and Technology (CUSAT), Kerala, India. His academic journey began at Maharajas College, Ernakulam, where he developed a deep interest in physics, later pursuing advanced studies in

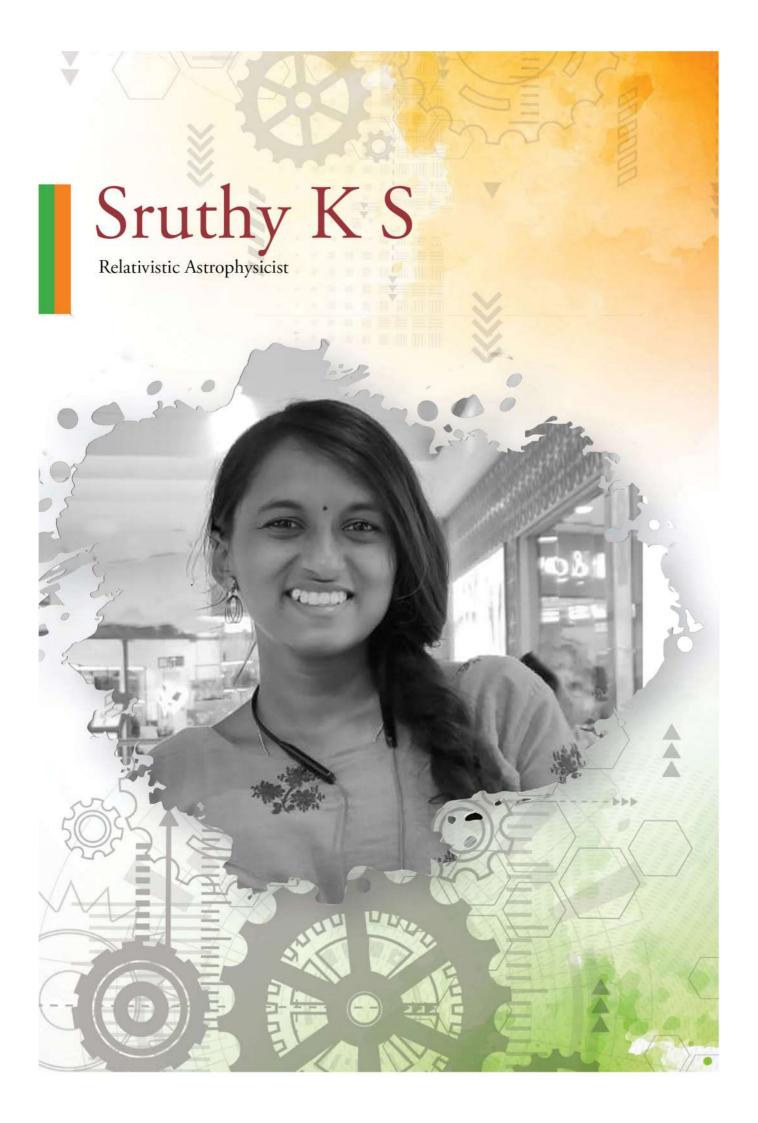
cosmology and theoretical physics. Currently, his Ph.D. research is centered on understanding the universe's late-time accelerated expansion, with a focus on

constructing a dark energy model that adheres to thermodynamic principles and the holographic framework. Manosh's work is innovative in its approach, exploring entropic models such as Rényi entropy to provide new perspectives on dark energy, and addressing critical challenges like cosmic tensions in observational data.

Beyond cosmology, Manosh has also delved into neutrino physics through his involvement with the NOvA experiment at Fermilab, USA. His research in this area has provided significant insights into the geometric phases of neutrino mixing, examining their dependence on mass ordering and CP-violating phases. His work explores both vacuum conditions and matter effects, offering a nuanced understanding of how neutrinos interact and oscillate.

Active researcher who doesn't settle until the puzzle is better understood. Tries to bridge the gap between observations and theories.

Manosh's academic rigor is complemented by his experience as a project fellow and intern, where he honed his skills in high-energy physics and quantum optics. His contributions to research are widely recognized, with several published papers and conference presentations that showcase his commitment to advancing knowledge in cosmology and particle physics. Driven by a curiosity for the fundamental laws of the universe, Manosh continues to explore the intersection of quantum theory, cosmology, and high energy particle physics, making significant strides in his field.





**ruthy K S** is a PhD scholar in Relativistic Astrophysics at the Manipal Centre for Natural Sciences, Manipal Academy of Higher Education. Under the mentorship of Dr. Chandrachur Chakraborty, her research focuses on general relativity, black holes, accretion physics, and high-energy astrophysics. She holds an MSc in Physics from Maharaja's College, Ernakulam, Kerala

and a BSc in Physics from Newman College, Thodupuzha, Kerala. She has also

served as a Research Assistant for the STREAM Ecosystem Project at CUSAT, where she developed innovative, research-based learning modules for school students.

Widely recognized as one of the finest young science communicators in Kerala, Sruthy has conducted numerous workshops and seminars on space science and technology, inspiring students, teachers, and the general public to engage with astronomy and astrophysics. She is an Editorial Board Member of *LUCA* (KSSP) and former Editor-in-Chief of *Luminaries* Digital Science Magazine. Actively involved with initiatives like

Through her research and extensive science outreach, she continues to inspire young minds to explore the universe and pursue careers in science.

Poetry of Reality, BreakThrough Science Society, and Positron Science Foundation, she has also contributed to citizen science projects such as RAD@home Astronomical Collaboratory and asteroid search campaigns, with 14 provisional discoveries to her credit. Alongside research, Sruthy is a passionate writer and blogger, committed to making complex scientific ideas accessible and engaging.



Science Communicator, Writer and Astrophotographer





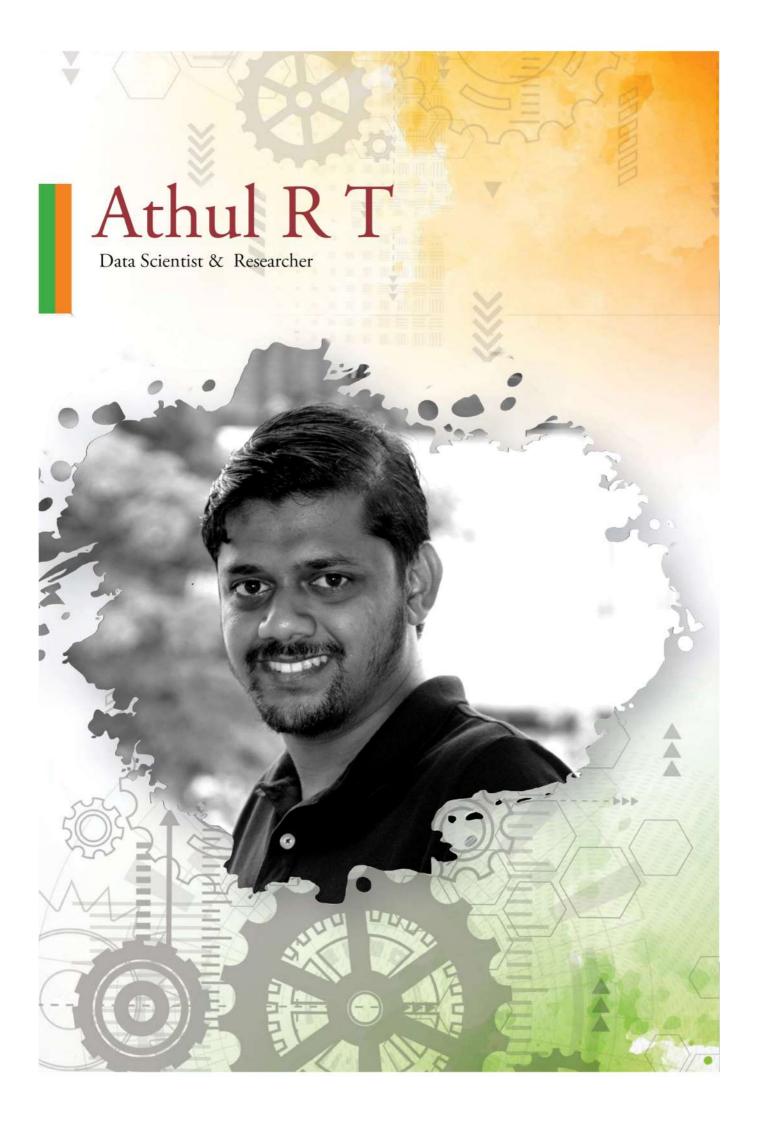
ith over a decade of experience, Sarath Prabhavu is a passionate science communicator, writer, researcher, and astrophotographer, specializing in astronomy. His dedication to making space science accessible has touched audiences ranging from school children to the general

public. As a coordinator of national and international astronomy classes and workshops, Sarath brings the wonders of the cosmos to people of all ages.

An avid stargazer, he has traveled across India, capturing the beauty of the night sky and organizing stargazing sessions. Sarath also hosts an astronomy show on Kerala Government's educational channel, Victers, inspiring young minds to look up to the stars. He holds an MPhil in Physics with a specialization in Astrophysics, focusing on Gamma Ray Bursts (GRBs) in his research. Sarath has worked at the International Liquid Mirror Telescope (ILMT), the largest of its kind in Asia, at the Devasthal Observatory. His experience extends to working with the Devasthal Optical Telescope (DOT), India's largest solid mirror optical telescope, further enriching his deep engagement with observational astronomy.

a renowned astrophotographer and science communicator, inspires others to explore the cosmos through his research, writing, and educational programs.

Sarath is associated with numerous prestigious organizations and institutions, including Edu Mithra, AASTRO Kerala, Kerala State Science and Technology Museum and Planetarium, Starvoirs, Space-Up Cusat, IIST Students Camp, IEEE, OutGROW, PRAVAHA Foundation, Discoveralpas, UL Space Club, Sasthrasnehi, Kerala Sasthra Sahithya Parishath, Kerala State Institute for Children's Literature, EMRC (Calicut University), IUCKLAM CUSAT, Malayalam Mission (IGCAR, Kalpakkam), SIET, and ARIES. His collaborations with these groups reflect his deep commitment to fostering a love for astronomy and science education across various platforms and communities.





thul R. T. is a highly accomplished researcher and data scientist with extensive expertise in data processing, visualization, and analysis, utilizing advanced deep learning and machine learning techniques. With a strong foundation in physics and data science, Athul has made significant contributions across various projects and domains.

From 2022 to 2024, Athul served as a Project Manager (R&D) at Msigma Gokulam, where he led research initiatives in artificial intelligence and machine

learning, focusing on areas such as computer vision, deep learning, embedded systems, and the Internet of Things (IoT). Prior to this role, he worked as a Researcher and Developer at Zackriya Solutions from 2020 to 2021, contributing to a range of projects in data science, machine learning, and software testing automation.

Athul's technical skills include operating specialized equipment, such as the Field Emission Scanning Electron Microscope at CUSAT during 2020-2021, and telescopes for astronomical observations from 2019 to 2020.

An active researcher and contributor of open science, open data and free and open source Software.

He has also conducted theoretical research on neutron star equations of state using Relativistic Mean Field theory.

He holds an MPhil in Physics from CUSAT (2017-2018), where his research focused on the orientation effects of disk galaxies through Monte Carlo simulations. Athul completed his MSc in Physics at the University of Kerala (2013-2015), where he reviewed the Lambda-CDM model of the universe, and earned a BSc in Physics from VTM NSS College (2010-2013), analyzing methods that advocate for the presence of dark matter.

Athul has been actively involved in astronomy-related activities since 2012. As a member of AASTRO Kerala, he has conducted various sessions on astronomy topics throughout the state. He is also engaged in citizen science projects, including those on the Zooniverse platform. Notably, he co-authored research related to Astrosat data analysis, which was published in "The Astrophysical Journal."

