

Webinar-2 Report

The webinar titled "**Unlock the Mysteries of the Universe! Insight in to Astrophysics**" was organized by the Kalpana Chawla Space Academy (KCSA) on 14/07/2025, Monday at 3:30. Dr Shailendra Singh, working as an Assistant Professor and Astrophysicist at KCSA, acted as guest lecturer for the webinar. The event was organized in a hybrid mode and was attended by more than 50 people, including students from several schools and colleges.

The session introduced young learners to the fascinating world of astrophysics. KCSA, a unique residential space science academy supported by ISRO, provides a robust platform for space education and research.

Dr. Singh began by answering the question of what astrophysics is and its role in understanding the universe. He guided the audience through the life cycle of stars, from interstellar dust clouds to compact stellar remnants. A major highlight was the detailed discussion on neutron stars and black holes, emphasizing their formation and properties. The concept of black holes is vividly explained through real-life examples, such as Sagittarius A* and M87*.

Participants also learned how black holes are observed indirectly through gravitational lensing and wave detection. Gravitational waves were introduced as ripples in space-time, linking astrophysics to Einstein's general relativity.

Dr. Singh stressed the revolutionary impact of technologies like the Event Horizon Telescope. He inspired attendees to reflect on cosmic mysteries such as the possibility of extraterrestrial life.

The webinar emphasized that all elements in our bodies—except hydrogen and some helium—were formed in stars. By describing us as "stardust," he beautifully connected science to personal identity.

The session concluded with a call to stay curious and keep exploring the universe. It was a captivating and educational experience, especially for budding space enthusiasts.

www.kcsa.org.in

1800 2673 940

contact@kcsa.org.in

Adv. Bapusaheb Bhonde High School
Lonavala, Maharashtra 410401, India



WHAT IF YOUR CHILD COULD BE THE NEXT SPACE SCIENTIST?

Join Dr. Shailendra Singh for an inspiring session delving into the wonders of astrophysics. Discover how the universe began, what it's made of, and where humanity fits into the cosmic tapestry. Perfect for students and enthusiasts eager to explore the frontiers of space science.

Space :- Unlock the Mysteries of the Universe!
Insight into Astrophysics



Monday
14th July 2025



Time
3:30 PM - 4:30 PM



Platform
ONLINE



SPEAKER

Dr. Shailendra Singh

Astrophysicist,
Kalpana Chawla Space Academy (KCSA)

Topics Covered:

- What's the Buzz with Astrophysics?
- Sizzling Topics in the Cosmic Realm
- Mind-Blowing Discoveries
- Live Q&A with our expert

Who Should Attend?

- Curious about the universe?
- Want to understand black holes, dark matter, and the search for alien worlds?
- Join us for a deep dive into the science that shapes our understanding of the cosmos!



SCAN QR TO REGISTER



