

PRESS NOTE

Amaravati, September 15, 2025

"Phy-Spark 3.0" – SRM University-AP Introduce School Students to Astrophysics through Live Demonstrations & Sessions

SRM University-*AP* hosted Phy-Spark 3.0: Stars, Scopes & Spacetime on campus, as an outreach initiative for school students. A combination of lectures, experiments, demonstrations, and interactive sessions took place throughout the day-long programme introducing young students to the exciting fields of physics and astrophysics. 120 students from Geethanjali School, Kunchana, K V School, Nallapadu and Vijetha School, Guntur participated in the programme.

A public lecture delivered by Dr Shivaraj Kandhasamy, renowned scientist from the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, on the Detection of Gravitational Waves by LIGO was the highlight of the programme. Dr Kandhasamy explained how gravity shapes the fabric of spacetime and introduced the concept of gravitational waves. He walked through the historic Michelson-Morley experiment, the design and functioning of the Laser Interferometer Gravitational-Wave Observatory (LIGO), and the challenges of detecting such incredibly faint signals. The lecture also covered landmark detections, including gravitational waves generated from black hole mergers and binary neutron star collisions.

Dr Gangireddy Salla, Dr Ashmita Das, Dr Krishna Prasad Maity and Dr Pranab Mandal from the Department of Physics of SRM *AP* delivered academic sessions on several intriguing topics such as Telescope: Fundamentals and Designs, Binary Star Systems and General Theory of Relativity. The lectures were accompanied by live experiments and demonstrations of a live telescope, binary star experiments etc., and an interactive Q&A session facilitating hands-on experiential learning on astronomical observations and methods.

The lectures were followed by a lab visit where students experienced demonstrations of basic experiments, scientific equipment, and the application of ideas they had learned in theory.

The programme conducted to ignite the spirit of learning physics among the budding minds of school students was a resounding success. Through Phy-Spark 3.0, SRM University-AP successfully made complex concepts in physics and astrophysics accessible to school students providing them with a glimpse of how physics is applied in real-world research environments.