Contribution ID: **112** Type: **Workshop**

W06 - THE MYSTERIES OF LIGHT & GLOW

Tuesday, 24 November 2026 14:00 (1 hour)

Unravel the secrets hidden within the shadows, where the mysteries of the cosmos are veiled not in darkness, but concealed within the "light" both visible and invisible to our eyes. THE MYSTERIES OF LIGHT & GLOW invites participants to enter a thrilling realm of team-based inquiry, blending science with an exhilarating competition to decode the hidden ciphers of light and luminescence, ranging from molecular chemistry and the search for extraterrestrial life to the birth of distant stars in deep space.

Throughout the event, teams must collaborate to "hunt for hidden secret codes" embedded within each learning station. Participants begin by decoding light color mixing through authentic astronomical imaging techniques, using separate RGB filters and various wavelengths to reveal the hidden physical properties of celestial objects. They then dive into luminescent phenomena by uncovering invisible messages via UV Body Paint & Tattoo, assuming the role of astrobiologists in an Astrobiology mission to decode potential bio-signatures on exoplanets through chlorophyll luminescence, witnessing UV-light-driven chemical reactions in UV Resin to craft key clues, and simulating emission nebulae on a Glowing Wall (where a phosphorescent backdrop acts as a nebula and a flashlight represents a star) to reveal codes that appear only momentarily.

This competition offers more than just fun and teamwork in assembling secret codes to solve the final puzzle for victory; participants gain deep insights into the physics of light, advanced astronomical imaging, and the chemistry of luminescence. Ultimately, the experience cultivates a scientific mindset that will forever transform how they perceive "light" both around them and across the universe.

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