

STEM+A@Astronomy Project: Integrating Astronomy Education into Formal Science Curriculum by Engineering Design and Science Inquiry

Tuesday, 2 September 2025 15:00 (15 minutes)

Astronomy, as an interdisciplinary science, uniquely integrates fundamental concepts from various scientific disciplines, making it highly relevant and engaging for diverse audiences. However, its integration into national curricula varies significantly across countries, raising questions about its optimal level and role within these frameworks. This presentation explores the challenges and opportunities associated with implementing astronomy education, focusing on the STEM+A@Astronomy project. By leveraging engineering design cycles and scientific inquiry, this project enhances learners' astronomical literacy and problem-solving skills, applying astronomical knowledge to real-world situations. The project aims to foster curiosity about night sky observation, space science, and planetary science through experiential learning and hands-on experiences, suitable for modular lessons in primary education. The discussion will address strategies for overcoming implementation barriers and maximizing the benefits of astronomy education in formal settings, highlighting the potential for astronomy to enrich STEM curricula globally.

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Session Classification: Oral Presentation

Track Classification: Astronomy Curriculum