

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space for All: Decolonial Practices in Space (2)

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DECENTRALIZED AUTONOMOUS CONSTRUCTION: THE PROMISE OF EVOLUTIONARY  
MASTER PLANNING AND SPACE ARCHITECTURE FOR MARGINALIZED ENTITIES ON THE  
MOON

**Abstract**

The concept of a permanent human presence on the Moon is now supported by growing interest and investment in private and public efforts alike. Multiple nation-states have expressed interest in developing a permanent Moon base. However, the volatile geopolitics and uncertain future of Lunar development stemming from a lack of internationally recognized laws and treaties governing land use and resource extraction raise questions as to who might be the first to land and construct infrastructure on the Lunar surface. Time-based building information modeling approaches (4D BIM) and the potential future enabled by decentralized autonomous construction are elaborated as a means of undoing the narrative of the first on the Moon, and acknowledging and anticipating how to design for the organizations, institutions, and entities who might be the last.