SPACE SYSTEMS SYMPOSIUM (D1)

Space Systems Engineering - Methods, Processes and Tools (2) (4B)

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THE JPL INNOVATION FOUNDRY A-TEAM FOR ADVANCED CONCEPTS: A CURRENT STATUS AND CAPABILITIES UPDATE

Abstract

The JPL Innovation Foundry ("The Foundry") assists in formulating science and technology missions from early immature concepts (Concept Maturity Level (CML) 1) to selectable-for-flight mission proposals (CML 6) and everything in between. Within the Foundry, several concurrent engineering teams utilize state-of-the-art innovative methods combined with advanced tools and subject matter experts. The Foundry's A-Team encompasses early concept development from initial feasibility to trade space exploration (CML 1 to CML 3). Recently, the A-Team expanded available products and services. New capabilities include science and technology mission concept outlining based on established storytelling and product design methodologies, planetary mission trade space, and targeted big data with prioritized searches. These new capabilities, combined with the products and services since A-Team inception in 2011, provides teams with a formidable array of methods, tools, and subject matter experts to advance their concepts to the next level.