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“Diámesos”: The Art of Interfacing Robotics to Things in Space

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Abstract

The domain of robotics today translates to any type of system that manipulates, moves, affects or modifies either its environment or other things. For decades elements in space are monolithic, built on the ground and then transported to space for one purpose and life. Applying the construct of “robotics” to the space domain enables a rethinking of how single use elements are designed and can be utilized, post launch. The singular challenge to changing this entrenched culture is the lowly “interface”; the entity that connects two or more things together. This talk will discuss the unique challenges and morphology of space system design, and where potential connection points between elements may lie for efficiency and optimization, all under the rubric of applying elements of robotics to affect, post launch.