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Late breaking abstracts (LBA)

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DEVELOPMENT OF A ROBOTIC FLUID TRANSFER INTERFACE BASED ON RIDER
CONNECTOR

Abstract

Standard Interfaces (SI) are a central pillar for the On-Orbit Servicing, Assembly and Manufacturing (OSAM) applications. Inside the OSAM market it is expected that life extension and refuelling applications will represent a large share of the market demands, as shown by several studies. Thus, SENER Aeroespacial is developing a SI product with fluid transfer capabilities based on the combination and leveraging of SIROM (Standard Interface for Robotic Manipulation) and RIDER (Refuelling Interface Development for ESPRIT). In this paper, SENER Aeroespacial will briefly present RIDER fluid transfer connector and how it has been implemented inside SIROM design, allowing to carry out refuelling activities as part of the SI performance. Performances of SIROM with resupply capabilities will be shown, with special emphasis on the fluid transfer function.