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## C4Or1B-03: [Invited] NASA Cryogenic Fluid Management Portfolio Project - Modeling and Technologies Portfolio Overviews

Thursday 22 May 2025 10:00 (15 minutes)

The Modeling and Technologies Portfolios are part of The NASA Cryogenic Fluid Management (CFM) Portfolio Project's (CFMPP). The Modeling Portfolio develops, enhances, validates, and demonstrates Computational Fluid Dynamics (CFD) and Nodal tools to address capability gaps for predicting cryogenic fluid behavior in 1-G and microgravity environments for use as design tools for future NASA missions. The Technologies Portfolio designs, develops, tests, and evaluates critical-need cryogenic components enabling long-duration CFM storage and propellant transfer. Major activities within the Technologies Portfolio include valve technology and cryogenic sensors. This portion of the NASA cryogenic propellant/fuel panel provides an overview including goals, objectives, and status for both the Modeling Portfolio and the Technologies Portfolio in the CMFPP.

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**Session Classification:** C4Or1B - [Special Session] NASA's Cryogenic Fluids for Aerospace Propulsion Applications