

Session Program

9-13 Jul 2023



CEC/ICMC 2023 Abstracts & Technical Program

C1Or2D: Thermophysics II: Numerical Studies

Hawaii Convention Center

Sunday 9 July

11:00

C1Or2D: Thermophysics II: Numerical Studies

Session | **Location:** 323B | **Conveners:** Konstantin Matveev, Mohammad Kassemi

11:00–11:15

C1Or2D-01: Recent Computational Fluid Dynamics Modeling of Flow Boiling During Cryogenic Propellant Transfer in Terrestrial and Reduced Gravity

Speaker

Jason Hartwig

11:15–11:30

C1Or2D-02: Investigation and perspectives of using Graph Neural Networks to model complex systems: the simulation of the helium II bayonet heat exchanger in the LHC

Speaker

Luigi Serio

11:30–11:45

C1Or2D-03: Vapor-Liquid Interfaces of Cryogenic Fluids in Presence of Non-Condensable Gases: Insights from Molecular Simulations

Speaker

Ashwin Ravichandran

11:45–12:00

C1Or2D-04: Modeling of Cryogenic Heated-Tube Flow Boiling Experiments of Nitrogen and Methane with the Generalized Fluid System Simulation Program

Speaker

Michael Baldwin

12:00–12:15

C1Or2D-05: A numerical investigation on vapor-liquid equilibrium of mixed-refrigerants by solving the Rachford-Rice equation

Speaker

Dr Nir Tzabar

12:15