

## **Sunday 9 July**

11:00

## C10r2D: Thermophysics II: Numerical Studies

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

11:00-11:15

C10r2D-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

C10r2D-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

C10r2D-03: Vapor-Liquid Interfaces of Cryogenic Fluids in Presence of Non-Condensable Gases: Insights from Molecular Simulations

Speaker

Ashwin Ravichandran

11:45-12:00

C10r2D-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

C10r2D-05: A numerical investigation on vapor-liquid equilibrium of mixed-refrigerants by solving the Rachford-Rice equation

**Speaker** 

Dr Nir Tzabar

12:15