



# 10th International Workshop on Radiation of High Temperature Gases for Space Missions

## Monday 9 September 2024

### Radiation modeling and simulation - Oxford e-Research Centre (09:25 - 09:50)

time	[id] title	presenter
09:25	[185] Thermochemical Characterisation of Shock Heated Flows	GLENN, Alex MCGILVRAY, Matthew

### Radiation modeling and simulation - Oxford e-Research Centre (14:00 - 15:40)

time	[id] title	presenter
14:00	[163] Sensor-based Radiation Signature Computations in Hypersonic Flow using a Reverse Photon Monte Carlo Method	Prof. MUNDT, Christian
14:25	[159] Kinetic Modeling and Impact of Methane on Radiative Heating for Ice and Gas Giant Entry	CARROLL, Alex
14:50	[162] Aerothermodynamic, material response and radiation modelling for the detection of demising spacecraft during re-entry	GARBACZ, Catarina
15:15	[183] A reinvestigation of the C\$\$_2\$\$ Deslandres-d'Azambuja radiative system	LINO DA SILVA, Mario

## Tuesday 10 September 2024

### **Radiation modeling and simulation - Oxford e-Research Centre (11:10 - 12:30)**

time	[id] title	presenter
11:10	[182] Radiative Heating for Ice Giant Entries	LINO DA SILVA, Mario
11:40	[137] Characterization of high temperature N <sub>2</sub> /CH <sub>4</sub> emission	MERHABEN, Cyrine
12:05	[170] Through-Model Fibre Optic Emission Spectroscopy for Studying Planetary Entry Radiative Heat Flux	JAMES, Chris

### **Radiation modeling and simulation - Oxford e-Research Centre (13:55 - 14:50)**

time	[id] title	presenter
14:00	[189] Electron Number Density Estimation for High-Speed Mars Entry Condition	LIU, Yu
14:25	[176] Calibration of Rate Parameters Against Shock Tube Emission Spectroscopy	HANSSON, Kaelan

### **Radiation modeling and simulation - Oxford e-Research Centre (16:05 - 16:30)**

time	[id] title	presenter
16:05	[179] Shock Curvature Effects in Shock Tube Data	CLARKE, Justin

# Wednesday 11 September 2024

## Radiation modeling and simulation - Oxford e-Research Centre (11:50 - 12:40)

time	[id] title	presenter
11:50	[177] Investigation of Shock Speed Variation Effects on Expanding Flow Experiments in the NASA Electric Arc Shock Tube	GANGA, Kanishk

# Thursday 12 September 2024

## Radiation modeling and simulation: Missions - Oxford e-Research Centre (14:00 - 15:15)

time	[id] title	presenter
14:00	[178] Electron Number Density Measurement in the T6 Stalker Tunnel utilising Langmuir Probes	NICK, Nathalie
14:25	[145] MITIGATING DRAGONFLY TPS DESIGN RISKS THROUGH IMPROVED AEROTHERMAL ENVIRONMENTS	Dr BRANDIS, Aaron
14:50	[169] Ultra-Highspeed Optical Emission Spectroscopy: Benefits and Difficulties	LU, Nathan