

Session Program

17-19 Jun 2026



ATD3 Workshop 2026

Ablation and material response

Toulouse - Cité de l'Espace, Accueil
Altair meeting room

Thursday 18 June

09:00

Ablation and material response

Session | **Location:** Toulouse - Cité de l'Espace, Accueil, Altaïr meeting room | **Conveners:** Jean Lachaud, Eddy Constant

09:00-09:18

Eliminating B' Tables: Time-Accurate Explicit Coupling in PATO for Hypersonic Solvers

Speaker

Mr Gabriel Merlaud

09:18-09:36

Multi-scale stochastic modeling of porous ablators

Speaker

Savio Poovathingal

09:36-09:54

Quantification of stratospheric solid aerosols injection by global rocket launch and spacecraft re-entry

Speaker

Quentin Taupin

09:54-10:12

Investigations of High-Temperature Oxygen-Carbon Ablation by Molecular Beam-Surface Scattering

Speaker

Timothy Minton

10:12-10:30

From Molecular Beam Studies to Aerodynamics: Development of a Gas-Surface Scattering Model for LEO/VLEO

Speaker

Pedro Jorge

10:30

10:50

Ablation and material response

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10:50-11:08

Assessment of Particle Formation During Re-entry of Spacecraft

Speaker

Dominik Kuentler

11:08-11:26

Finite-Rate Ablation and Oxide-Layer Models for Reentry Spacecraft

Speaker

Tom Schwartzentruber

11:26-11:44

Modeling Spacecraft Demise Using the KATS Multi-Physics Framework

Speaker

Alexandre Martin

11:44-12:02

Developing a Pyrolysis Gas Thermal Blocking Model for Reentry Demise

Speaker

Dr Benton Greene

12:02-12:20

Thermal and mechanical responses of a pyrolyzable heat shield subjected to ablation and deformation

Speaker

Céline Baranger

12:25