





29th DYMAT Technical Meeting 2026:
“Dynamic testing and modelling of heterogeneous materials and their interfaces”

Program

 Tuesday, 8th September 2026 (3SR & Kilian) 		
Visit in 3SR (11:00 – 12:00)		
Lunch in 3SR		
13:20	Welcome in Kilian: M. Arrigoni, D. Eakins, P. Forquin	
1st Keynote lecture in Kilian		
13:40 – 14:20	On the possible contributions of Instrumented Nano-indentation test to dynamical testing: Between Complementarities and Similarities	Pr. GUIN Jean-Pierre Institut de Physique de Rennes, Univ. de Rennes, CNRS – France
Sponsors’ session in Kilian		
14:20 – 14:40	Specialised Imaging Shimadzu	CHAN Wai MARJOLLET Philippe
14:40 – 15:00	Scandiflash and Pulse MC ² HBK	JERRESAND David, DA SILVA Fabrice BOULET Xavier
15:00 – 15:20	Cordin Abstrao	ANDERSON Robert LIMIDO Jérôme
Coffee break and Sponsor’ exhibition in 3SR		
Session I in Kilian: Dynamic testing and diagnostics applied to heterogeneous materials at very high-rates		
16:00 – 16:20	Experimental and numerical investigation on porous graphite crater formation under laser shock and flyer impacts	WEBER Mathieu LULI, CNRS – France
16:20 – 16:40	Dynamic behavior of plasma-sprayed ceramics under successive laser-driven shock wave loadings	BOUHASSOUN Tahir ISAE-ENSMA, Université de Poitiers, CEA CESTA – France
16:40 – 17:00	Crater formation of porous graphite by hypervelocity impact and laser-driven impact	REYNIER Baptiste CESTA-CEA – France
17:00 – 17:20	Dynamic characterisation of interlaminar properties of UHMWPE-fibres composites using laser shock	WATREMEZ Clément Ecole Centrale de Nantes – France
17:20 – 17:40	3-D FDEM Modeling of High-Velocity Penetration in High-Strength Brittle Materials with Anisotropic Fracture Characteristics	KIM Junhyeong Jeonbuk National University – South Korea
17:40 – 18:00	Inverse method investigation of the mechanical response of a fragmented silicon carbide under impact using X-ray microtomography	FRANCART Charles Univ. Grenoble Alpes, 3SR – France
End of the session		



Wednesday morning, 9th September 2026 (MaCI)

8:40	Welcome in MaCI	
2nd Keynote lecture in MaCI		
9:00 – 9:40	Asteroids and Meteorites Cratering, Disruption, and Momentum Enhancement	Dr. CHOCRON Sidney Southwest Research Institute, Texas – United States
Session II in MaCI: Dynamic behaviour of granular, 3D printed and cellular materials		
9:40 – 10:00	Frictional interfaces as a mechanism for introducing strain-rate sensitivity into additively manufactured cellular structures	PATIL Sankalp Albert-Ludwig University of Freiburg, INATECH – Germany
10:00 – 10:20	Li-ion Batteries as saturated heterogeneous granular medium: impact experiments and analysis	TANCOGNE-DEJEAN Thomas ETH Zurich – Switzerland
Coffee break and Sponsor' exhibition in MaCI		
Session II in MaCI: Dynamic behaviour of granular, 3D printed and cellular materials		
11:00 – 11:20	Impact of Relative Humidity on the Compressive Behavior of 3D-Printed Onyx: Material and Structural Analysis	SUKIA Itxaro Mondragon Unibertsitatea Gipuzkoa – Spain
11:20 – 11:40	Deformation and Failure Mechanisms of Optimized Architected Materials under High Strain-Rate Loading	WELLER Alexis Laboratoire de Mécanique des Solides, Ecole Polytechnique – France
11:40 – 12:00	Effects of Water Content on the Dynamic Compression Response of Ultra-fine Silica Powder	LEE James University of Oxford – United Kingdom
12:00 – 12:20	Statistical characterization of damage in granular materials aided by machine learning	ROBIN Camille French Alternative Energies and Atomic Energy Commission – CEA – France
Lunch in MaCI		



Wednesday afternoon, 9th September 2026 (MaCI)

Session III in MaCI: Microscale testing and mesoscale modelling of heterogeneous materials at high-rates

13:40 – 14:00	Mechanical properties of phases in a heterogeneous RBBC ceramic using micropillar compression technique	LAROSE Pierre Univ. Grenoble Alpes, 3SR – France
14:00 – 14:20	Laser-Induced Bulk Acoustic Wave Propagation in Porous Alumina: Influence of Multiple Scattering	BOUCHER-BELLANGER Antoine CESTA-CEA – France
14:20 – 14:40	Orientation-dependent strain-rate sensitivity and interfacial failure in short glass-fiber reinforced polyamide	SCHAEFER Erwin EDAG Eineering Schweiz GmbH – Switzerland
14:40 – 15:00	When microstructure matters: numerical insights into dynamic fragmentation at high strain rates and small scales	GIRARDOT Jérémie ENSAM, Université de Bordeaux – France
15:00 – 15:20	Solid-State Recycling of AA2033 Aluminium Swarf via High-Strain-Rate Hot Deformation	AGIRRE Julen Mondragon Unibertsitatea – Spain

Coffee break and Sponsor’ exhibition in MaCI

Session IV in MaCI: Experimental characterisation and modelling of interfaces and fracture processes

16:00 – 16:20	Particle-Matrix Interface Effects on the Dynamic Strengthening of Heterogeneous Ti-W Alloys Produced by Spark Plasma Sintering	LOMNITZ Alon Ben-Gurion University of the Negev, Beer-Sheva – Israel
16:20 – 16:40	Dynamic behavior of shear frictional interfaces	RUBINO Vito Ecole Centrale de Nantes – France
16:40 – 17:00	From Formulation to Implementation of Phase Field Model for Dynamic Fracture	VIRAK Alexander Univ. Grenoble Alpes, 3SR – France
17:00 – 17:20	Dynamic study on mode II fracture toughness on glass and flax fibre bio-epoxy composites	BUDNINPECH Nontanasorn Bristol Composites Institute – United Kingdom
17:20 – 17:40	Computational Prediction of Spall Strength of Ceramic composites	ZHOU Min Georgia Institute of Technology – United States

DYMAT General Assembly

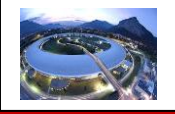
Gala diner downtown (20:00)



Thursday morning, 10th September 2026 (ESRF)

8:00	Registration in ESRF	
8:40	Welcome in ESRF	
3rd Keynote lecture in ESRF		
9:00 – 9:40	X-ray phase contrast imaging as an in-material time-resolved probe of shock properties in high-solids-loaded polymer composites with aligned porosity	Pr. THADHANI Naresh N. Georgia Institute of Technology, Georgia – United States
Session V in ESRF: Dynamic behaviour of particulate, laminated and sandwich composites		
9:40 – 10:00	Rate sensitivity of glass fibre composites, and use of energy flux for characterization	PERRY James Cavendish Laboratory, University of Cambridge – United Kingdom
10:00 – 10:20	Photon Doppler Velocimetry for Studying UHMWPE Composite Behavior Under Ballistic Impact	LEMIERE Thibaut Univ. Grenoble Alpes, 3SR – France
Coffee break and 1st poster session in ESRF		
Poster	Application of the Virtual Fields Method to Polymer Bonded Composites	VIVIAN A. Perez Cavendish Laboratory, University of Cambridge – United Kingdom
Poster	The Role of Plastic Poisson’s Ratio in Necking of Polycarbonate	GANZENMÜLLER Georg C. Ernst-Mach-Institut – Germany
Poster	Automatic image analysis for precise characterization of natural materials	RIGAUT Coralie Univ. Bordeaux, LaBRI – France
Poster	Phase Field implementation in ABAQUS using the heat equation analogy	ALEMPS Maxime Univ. Grenoble Alpes, 3SR – France
Poster	Wave Separation in SHB Using Linear Encoders	FÍLA Tomáš Czech Technical University in Prague – Czech Republic
Session V in ESRF: Dynamic behaviour of particulate, laminated and sandwich composites		
11:00 – 11:20	Influence of water saturation on concrete dynamic behaviour	CALMELS Théo CEA-Centre de Gramat – France
11:20 – 11:40	Multiscale characterization and modelling of Elium/Flax laminate composite at high strain rate	BAHLOULI Nadia ICube laboratory, Université de Strasbourg – France
11:40 – 12:00	Multiscale characterization of Kevlar® 49 over a wide range of strain rates	DEMARTY Yaël Institute of Saint-Louis – France
12:00 – 12:20	Triggering radial back face fracture of additively manufactured ceramic tiles	DE COSTER Robbe Royal Military Academy – Belgium

Lunch in ESRF



Thursday afternoon, 10th September 2026 (ESRF)

Visit in ESRF (13:40 – 14:20)

Session VI in ESRF: Visualisation of deformation and failure processes in heterogeneous materials at high-rates

14:20 – 14:40	Dynamic Shear Deformation and Crack Initiation in AA5754: Insights from Combined X-Ray Phase Contrast Imaging and Digital Image Correlation	SCHOTTSTEDT Luisa Chemnitz University of Technology – Germany
14:40 – 15:00	Moisture Effects on the Dynamic Compression of Polymeric Syntactic Foams: Strain-Rate Dependence and Synchrotron Characterisation	PELLEGRINO Antonio Imperial College London – United Kingdom
15:00 – 15:20	Processing - Microstructure - Property Relationships in Porous Alumina under Severe Loadings	LE BARBENCHON Louise I2M, Université de Bordeaux, INRAE – France

Coffee break and 2nd poster session in ESRF

Session VI in ESRF: Visualisation of deformation and failure processes in heterogeneous materials at high-rates

16:00 – 16:20	The effect of strain rate on fracture toughness and damage behaviour in Plain Woven CFRP composites	RODRIGUEZ-SERENO Jose Manuel Universidad Carlos III de Madrid – Spain
16:20 – 16:40	Impact of heterogenous groove patern on Sn jet formation studied by fast X ray imaging: Evidence of complexe lateral release waves interaction	BURIE Jean-René CEA DAM DIF – France
16:40 – 17:00	Planar impacts on Tensylon® HSBD30A (Ultra High Molecular Weight PolyEthylene)	ARRIGONI Michel ENSTA, Institut Polytechnique de Paris, IRDL – France
17:00 – 17:20	Characterising damage mechanisms of CFRP laminates under high-strain-rate loading and extreme temperatures using synchrotron X-ray imaging	SUN Xiyao University of Oxford – United Kingdom
17:20 – 17:40	Dynamic Fragmentation Studies of Solid Hydrogen using Hopkinson Bar Technique and High Speed Cameras	BERTON Jordan French Alternative Energies and Atomic Energy Commission - CEA – France
17:40 – 18:00	The E-spalling technique: an experimental method to analyse the fragmentation process in brittle materials at high strain-rates	FORQUIN Pascal Univ. Grenoble Alpes, 3SR – France

Conclusion

End of the Technical meeting