

Program - Monday 08/09/2025

8h15 – 8h50 Registration – Coffee Break

8h50 – 9h00 Introduction

9h00-10h40 Session 1 – Model-Experiment Dialog 1, Chairman: Pr. P. Shipway

Start	End	Title	Authors
09:00	09:20	Fretting Fatigue Behaviour of Laser Powder Bed Fusion-Produced Ti-6Al-4V: Experimental and Numerical Analysis	Grzegorz Glodek, Sanjay Gothivarekar, Brecht Van Hooreweder, Reza Talemi
09:20	09:40	Fretting fatigue tests and life estimation under out-of-phase and asynchronous contact loads	Giorgio André Brito Oliveira, Raphael Araújo Cardoso, Gabriel Magalhães Juvenal Almeida, José Alexander Araújo
09:40	10:00	Experimental and numerical study of shrink-fitted assemblies under fretting fatigue solicitations: effect of interference and geometry	Morgan Fourcin , Siegfried Fouvry, Pierre Arnaud, Florent Bridier
10:00	10:20	Fretting Fatigue: Novel Experiments and Analysis	Samira Ghadar, Ali Fatemi , Nam Phan
10:20	10:40	An in-situ Fretting test for X-Ray Tomography	Jérémy Grondin , Pierre Arnaud, Youssef Younes, Benjamin Smaniotto, Jean Christophe Teissedre, Camille Gandiolle

10h40-11h00 Coffee break – Espace Simondon

11h00-12h20 Session 2 – Computational Fretting-Fatigue 1, Chairwoman: Pr. S. Pommier

11:00	11:20	Numerical modelling of sphere-to-flat cyclical indentation of polycarbonate: fatigue, fretting wear and fracture	Thiago Doca
11:20	11:40	Asymptotic Representation of Contact Edges with Varying Normal Load	David Hills and James Barber
11:40	12:00	Modelling of multiple coupled normal and tangential contacts, application to the simulation of axial blade/disk attachments	Ben Kabondo Kashala , Auriane Platzer, Arnaud Duval, Pascal Casaliggi, Bruno Damiens, Thibaut Chaise, Daniel Nélis
12:00	12:20	Fretting in an anisotropic contact: a 2D non-local approach for a cubic material	Danilo R.S. Resende , Amakoe Ahyee, Nathalie Serres, J. Alex Araújo, Sylvie Pommier

12h20-13h40 Lunch

13h40-15h20 Session 3 – Computational Fretting-Fatigue 2, Chairman: Pr. R. Talemi

13:40	14:00	Asymptotic Representation of Contact Edges with Partial Slip	Beth Eames , David Hills
14:00	14:20	A cross-validation approach in neural networks for fretting fatigue prediction on Al 7075 T651	Zacarías Conde-Teruel, Daniel García-Vallejo, Carlos Navarro , Jaime Domínguez
14:20	14:40	A Computationally Efficient Hybrid Technique for Three- Dimensional Contact Analysis	P Pradhan, H Murthy
14:40	15:00	A nonlocal ANN framework for predicting fretting fatigue life	Raphael Araújo Cardoso , Giorgio André Brito Oliveira, Juliano Fernandes Dias Tavares de Brito, José Alexander Araújo
15:00	15:20	Study on the Effect of Grain Orientation on Fretting Fatigue Behavior Using CPFEM	Sutao Han , Iakovos Tzanakis,

15h20-15h40 Coffee break – Espace Simondon

15h40-16h40 Session 4 – Wear and Fretting Wear 1, Chairman: Pr. S. Fouvry

15:40	16:00	Length scale effects on the fretting wear of DLC coating systems	Samuel J. McMaster, Stephen R. Goodes, Ben D. Beake, Tomasz W. Liskiewicz
16:00	16:20	Fretting Wear response of a 304L stainless steel contact in pressurized hydrogen up 25 MPa: comparison versus air and Helium	Mohammed FARTAS , Siegfried FOUVRY, Pierre ARNAUD, Maria Isabelle DE BARROS, Yazid MADI,
16:20	16:40	Reciprocating Wear Damage in Steam Turbine Grid Valves: Influence of Coatings and Thermochemical Surface Treatments	Mario Lavella , Daniele Botto

17h00 Group photo

18h00-20h00 Welcome Cocktail – Brass & Co

Program - Tuesday 09/09/2025

8h30 – 9h00 Coffee Break

9h00-10h40 Session 5 – Computational Fretting-Fatigue 3, Chairman: Pr. D. Hills

Start	End	Title	Authors
09:00	09:20	Influence of Subsurface Defects and Material Anisotropy on the Fretting Fatigue Response of AMed Ti-6Al-4V	Grzegorz Glodek, Sanjay Gothivarekar, Reza Talemi
09:20	09:40	Digital twins for fretting in submarine power cables	Chun Ting Poon , S.M. Uí Mhurchadha, A. Connolly, R.A. Barrett, S.B. Leen
09:40	10:00	Fretting Fatigue Modelling: Combining Crack Initiation and Propagation with multiaxial fatigue and Phase-Field	Iñigo Llavori , Gorka Ruiz-de-Egino, Nagore Otegi, Eguzkiñe Martinez-Puente, Sean Leen
10:00	10:20	On the fatigue life prediction of overhead conductors using neural networks	G André Brito Oliveira, R. Araújo Cardoso, P. H. C. Rocha, J. A. Araújo
10:20	10:40	Influence of Finite Friction on Pin Separation and Crack Growth in Deformable Pin Lug Assembly	M.N. Ramanath, H. Murthy

10h40-11h00 Coffee break – Espace Simondon

11h00-12h20 Session 6 –Wear and Fretting Wear 2, Chairman: Pr. T. Liskiewicz

11:00	11:20	Characterization of fretting damage formation via adhesive process & comparing different running conditions	R. Kovanen , T. Kasurinen, J. Juoksukangas, S. Khoshroo, M. Vippola, J. Hintikka, A. Mäntylä, J. Vaara, T. Frondelius
11:20	11:40	Fretting fatigue and torsional fretting wear of PC/ABS blends: effect of variable amplitude.	T. Pandim , K. Sales de Oliveira, T. Doca
11:40	12:00	Tribological behavior in fretting of Inconel 718 alloy obtained by additive manufacturing	N. Daoud, T. Malhomme, B. Berthel, Vincent Fridrici
12:00	12:20	Tribologically transformed zones in fretting contacts and the dependence of their formation on the conditions of wear and the resulting rate determining process	Philip Shipway

12h20-13h40 Lunch

13h40-15h20 Session 7 – Experimental Fretting-Fatigue 1, Chairman: Pr. R. Komoda

13:40	14:00	Fatigue life and crack growth of Inconel 718 superalloy at room and high temperatures under fretting fatigue	María Moreno-Rubio , D. Erena, J. Vázquez, Carlos Navarro, J. Domínguez
14:00	14:20	Understanding Hydrogen-Induced Degradation in Fretting Fatigue Strength	Kodai Araki , R. Komoda, M. Kubota, D. Takagosi, K. Asai, Y. Nomura
14:20	14:40	Experimental analysis of fretting fatigue life under multi-level normal load conditions	F. Da Rocha Chaves, S. Pommier , Y. Guilhem, N. Serres, J.Balmon
14:40	15:00	Calorimetric Analysis of Fretting Fatigue: Investigating Microplasticity in 35NiCrMo6 Steel	Bruno Berthel , Vincent Fridrici
15:00	15:20	Fretting Fatigue Damage of Steam Turbine Stainless Steel at High Temperature	Helmi Attia

15h30-19h00 Tour of the "Château de Breteuil" with tasting of French pastries

19h30-23h00 Gala Dinner at « La Belle Epoque »

Program - Wednesday 10/09/2025

8h45 – 9h20 Coffee Break

9h20-10h40 Session 8 – Model-Experimental Dialog 2, Chairman: Pr. A. Araújo

Start	End	Title	Authors
09:20	09:40	Prediction of the fretting-fatigue endurance of shrink fit lug-bush assemblies: a local Fretting Wear Spot correction	M. Le Falher, S. Fouvry , P. Arnaud, V. Maurel, N. Antoni, R. Billardon
09:40	10:00	Experimental study and modelling of fretting-fatigue- corrosion of galvanized steel in power lines.	Clément Medrala, Siegfried Fouvry, Pierre Arnaud, Cécile Duhamel, Vincent Maurel, Julien Saïd
10:00	10:20	Prediction of fretting fatigue failure	A. Mäntylä , J. Hintikka, V. Vanhala, J. Vaara, T. Frondelius, R. Kovanen, M. Vippola
10:20	10:40	Effect of Contact Rotation on Fretting Fatigue Crack Initiation in Total Sliding Conditions.	Pierre Arnaud , Siegfried Fouvry

10h40-11h00 Coffee break – Espace Simondon

11h00-12h20 Session 9 – Review, Chairwoman: C. Gandiolle

11:00	11:40	Fretting - Fatigue: State of the art in Helicopter	Alexandre Gautheron , Gaël Monavon , Romain Naalbandian , Alexandre Bonnin , Pierre Panico
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11h40-12h00 Closing Ceremony & Award Announcement

12h00-14h00 Lunch