



German Society for  
Aeronautics and Astronautics  
Lilienthal-Oberth e.V.



# IFASD 2026

## 21. INTERNATIONAL FORUM ON AEROELASTICITY AND STRUCTURAL DYNAMICS

**PROGRAMME BOOKLET**

**16 – 19 JUNE 2026**  
**GOETTINGEN (GERMANY)**



**IFASD  
WEB  
APP**



**IFASD2026.DGLR.DE**

## IFASD 2026 SUPPORTERS



**German Society for  
Aeronautics and Astronautics**  
Lilienthal-Oberth e.V.



**Deutsches Zentrum  
für Luft- und Raumfahrt**  
German Aerospace Center

## IFASD INTERNATIONAL COMMITTEE

Dr. Félix Arévalo (Spain)  
Dr. Luca Benassi (Germany)  
Dr. Carlos Alberto Bones (Brazil)  
Prof. Carlos Cesnik (USA)  
Dr. Hector Climent (Spain)  
Prof. Jonathan Cooper (UK)  
Prof. Roeland de Breuker (Netherlands)  
Ir. Bart Eussen (Netherlands)  
Mr. Eric Garrigues (France)  
Mr. Anders Karlsson (Sweden)  
Dr. Raymond Kolonay (USA)  
Prof. Andreas Linderholt (Sweden)

Mr. Alexis Laporte (France)  
Mr. Cédric Liauzun (France)  
Mrs. Mercedes Oliver Herrero (Spain)  
Prof. Sergio Ricci (Italy)  
Sascha Ruegamer (USA)  
Dr. Alessandro Scotti (Switzerland)  
Mr. Julian Seeley (UK)  
Dr. Bret Stanford (USA)  
Prof. Lorenz Tichy (Germany)  
Mr. Vincenzo Vaccaro (Italy)

### Imprint

#### Editor

German Society for Aeronautics and Astronautics – Lilienthal-Oberth e.V.  
Godesberger Allee 70  
53175 Bonn  
GERMANY  
Phone: +49 (0) 228/30 80 5-0  
Fax: +49 (0) 228/30 80 5-24  
[www.dglr.de](http://www.dglr.de)  
[ifasd2026.dglr.de](http://ifasd2026.dglr.de)

**TUESDAY, 16 JUNE 2026**

09:00 – 09:45	Opening Remarks
09:45 – 10:30	Plenary Lecture by Walt Silva
10:30 – 11:00	Coffee Break
11:00 – 13:00	Scientific Programme
13:00 – 14:15	Networking Lunch & Poster Presentations
14:15 – 16:15	Scientific Programme
16:15 – 16:45	Coffee Break
16:45 – 18:45	Scientific Programme
19:30 – 22:30	Welcome Reception @ Altes Rathaus Goettingen

**WEDNESDAY, 17 JUNE 2026**

08:30 – 09:15	Plenary Lecture by Elena García Sánchez
09:15 – 09:30	Change of Rooms
09:30 – 11:00	Scientific Programme
11:00 – 11:30	Coffee Break
11:30 – 13:00	Scientific Programme
13:00 – 14:15	Networking Lunch & Poster Presentations
14:15 – 16:15	Scientific Programme
16:15 – 16:45	Coffee Break
16:45 – 18:45	Scientific Programme
19:30 – 22:30	Networking Evening @ Restaurant Bullerjahn

**THURSDAY, 18 JUNE 2026**

08:30 – 09:15	Plenary Lecture by Elena García Sánchez
09:15 – 09:30	Change of Rooms
09:30 – 11:00	Scientific Programme
11:00 – 11:30	Coffee Break
11:30 – 13:00	Scientific Programme
13:00 – 14:15	Networking Lunch & Poster Presentations
14:15 – 15:45	Scientific Programme
15:45 – 16:15	Coffee Break
16:15 – 17:45	Scientific Programme
17:45 – 18:00	Change of Rooms
18:00 – 18:30	Closing Remarks



### Welcome Address by the Vice-President of DGLR and President of CEAS Cornelia Hillenherms

Dear Participants of the 21<sup>st</sup> International Forum on  
Aeroelasticity and Structural Dynamics 2026,  
Dear Colleagues and Friends,

On behalf of the Council of European Aerospace Societies (CEAS) and the German Society for Aeronautics and Astronautics (DGLR) I would like to extend a warm welcome to you for the IFASD 2026 in Goettingen!

We would like to extend a big thank you to the conference chair, Lorenz Tichy, from the Institute of Aeroelasticity at the German Aerospace Center (DLR), as well as to all supporters who contributed to making this event possible.

As you may know, Goettingen has a long history of academic excellence and is often referred to as the 'cradle of aerodynamics', thanks to the work of Ludwig Prandtl. In fact, at the beginning of the last century, the term 'aerodynamics' covered the entire field of flight physics, including topics that were later combined and defined as the discipline of aeroelasticity. Therefore, it is only logical to hold the IFASD in the exact city, where high-calibre research in this field is still taking place today.

As the President of CEAS I am proud to provide the framework for activities such as the IFASD. This Forum is a platform where experts from this entire research branch come together, industry, research institutions, academia, operators and regulatory bodies meet, discuss their ideas and exchange knowledge. The scientific programme consists of about 200 papers for presentation and posters on sixteen subject areas. Three plenaries from high-level speakers set the framework. This setting fosters personal interaction between all stakeholders, creating the perfect breeding ground for technological change and real innovation!

As such, the IFASD perfectly translates CEAS' main objectives into practise:

- Encouraging international collaboration, knowledge-sharing and networking,
- Recognising outstanding individuals,
- Supporting young people, and
- Fostering dissemination by conferences and journals: CEAS, together with Springer Nature, DLR and ESA, runs two peer-review journals, the CEAS Aeronautical Journal and the CEAS Space Journal.

Let's make the most of this opportunity to celebrate, share knowledge, and connect. I wish you a productive, enjoyable, and memorable conference!

See you in Goettingen!

Cornelia Hillenherms

## Welcome Address by the Conference Chair IFASD 2026 Lorenz Tichy



Dear participants

on behalf of the IFASD Programme Committee and the Local Organizing Committee of the International Forum on Aeroelasticity and Structural Dynamics (IFASD), I welcome you to the 21<sup>st</sup> IFASD, which will take place from June 16 to 19 June 2026 and for the first time in Goettingen (Germany). The forum is organized by the German Society for Aeronautics and Astronautics Lilienthal-Oberth e.V. with support of the Institute of Aeroelasticity of the German Aerospace Center (DLR).

The International Forum on Aeroelasticity and Structural Dynamics is the most important event for engineers and researchers working in the fields of aeroelasticity, structural dynamics and aeroservoelasticity covering computational and experimental methodologies, conceptual design as well as multidisciplinary optimization methods for scientific and industrial applications. IFASD 2026 will update you on the state of the art in research activities and industrial practices in the fields of Aeroelasticity and Structural Dynamics. It will provide an excellent opportunity for scientists and engineers from industry, research centers and universities to exchange knowledge and findings of current studies, and to discuss directions for future research.

Goettingen is famous for the Georg-August University, which was founded in 1734 by the British king and elector of Hanover George II. The IFASD conference takes place in the university's historic premises - the assembly hall and the conference and event centre in the heart of the city at the Wilhelmsplatz.

It was Felix Klein from the Institute of Mathematics, who, in 1907, commissioned Ludwig Prandtl with establishing a new facility for model studies of motorized airships called Motorluftschiffmodell-Versuchsanstalt (MVA), which, in 1919, became the aerodynamic research institution "Aerodynamische Versuchsanstalt" (AVA). Prandtl's doctoral student Watler Birnbaum made Goettingen's first contribution to the discipline later known as "aeroelasticity" with his dissertation about the flapping wing. In 1934, Hans-Georg Küssner, famous for his work on unsteady aerodynamics, came to the AVA and later founded the "Institut für instationäre Vorgänge" (Institute of unsteady phenomena), which is the origin of the current DLR Institute of Aeroelasticity, established in 1972. Drawing on its long-standing expertise in numerical and experimental methods, the institute today is working on cutting-edge research topics and helping to shape the future of aeroelasticity.


I am now looking forward to a fruitful conference with an interesting and broad exchange between the participants from universities, research organizations and industry and wish you inspiring days here in Goettingen.

Kind regards


Lorenz Tichy

16 JUNE 2026

09:00	<b>Forums Opening</b>	Assembly Hall at the Wilhelmsplatz
–		
09:45		
	<b>Moderation: Lorenz Tichy</b>	
	<b>Welcome Address:</b>	
	– Lorenz Tichy, Chairman of the IFASD 2026 Local Organising Committee	
	– Cornelia Hillenherms, President of CEAS and Vice President of the German Society for Aeronautics and Astronautics (DGLR)	
	– Marcus Fischer, Divisional Board Member for Aeronautics, German Aerospace Center	
	Further Information:	

20:00	<b>Welcome Reception</b>	„Altes Rathaus“
–	Registration required!	Markt 9
22:30	Doors open: 19:30	37073 Goettingen
	Further Information:	

17 JUNE 2026

20:00	<b>Networking-Evening</b>	Restaurant BULLERJAHN
–	Registration required!	Markt 9
22:30	Doors open: 19:30	37073 Goettingen
	Further Information:	

19 JUNE 2026

08:30

–

12:30

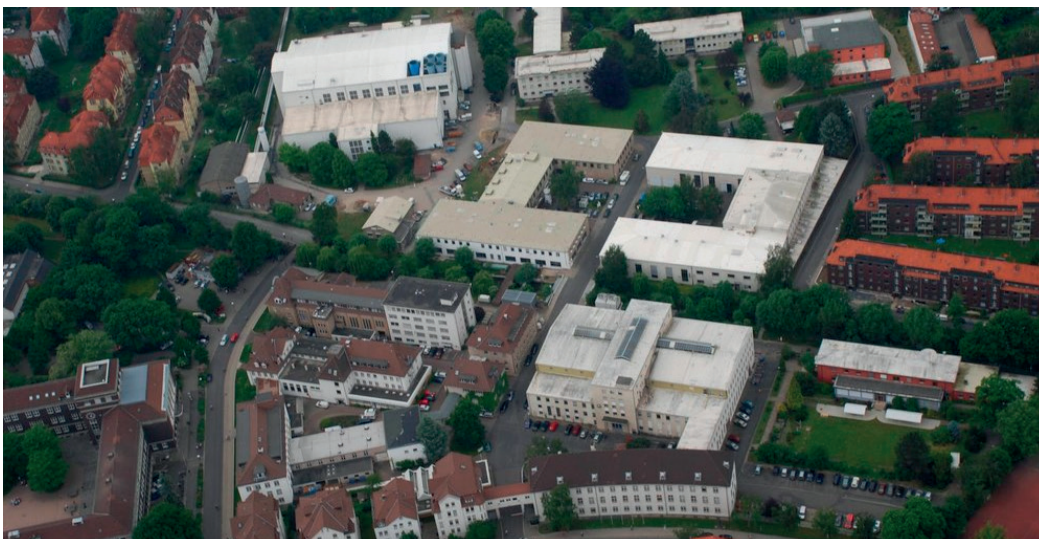
**German Aerospace Center (DLR): Site Goettingen**

The German Aerospace Center (DLR) at its Goettingen site would like to offer you the opportunity to gain insight into its day-to-day research activities and take you on a journey from the past to the present of aviation research in Goettingen. During a tour lasting approximately two and a half hours, you will visit several stations in small groups. The visit will also provide an opportunity to deepen existing contacts and establish new scientific partnerships.

German Aerospace  
Center (DLR)  
Bunsenstrasse 10  
37073 Goettingen

Participation is limited to confirmed registered attendees only.

Further  
Information:



# SCIENTIFIC PROGRAMME

Building	ASSEMBLY HALL AT THE WILHELMSPLATZ	CONFERENCE CENTRE „ALTE MENSA“ (1 <sup>ST</sup> FLOOR)
Room	AUDITORIUM (1 <sup>ST</sup> FLOOR)	V. TROTT HALL
Day	16 JUNE 2026	
09:00 - 09:45	OPENING REMARKS & WELCOME ADDRESSES	
09:45 - 10:30	REDUCED COMPLEXITY: THE ESSENCE OF A COMPLEX JOURNEY INVOLVING LANGUAGE, MATHEMATICS, AND EMOTIONS <i>WALT SILVA, EMERITUS LAKGLEY ASSOCIATE</i>	
	COFFEE BREAK	
11:00 - 13:00	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 1	COMPUTATIONAL AEROELASTICITY 1
	NETWORKING LUNCH & POSTER PRESENTATIONS	
14:15 - 16:15	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 2: UNCONVENTIONAL CONFIGURATIONS (1)	COMPUTATIONAL AEROELASTICITY 2
	COFFEE BREAK	
16:45 - 18:45	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 3: FLUTTER/LCO	COMPUTATIONAL AEROELASTICITY 3
	END OF SCIENTIFIC PROGRAMME DAY 1	
Day	17 JUNE 2026	
08:30 - 09:15	AEROELASTIC CERTIFICATION WITH EASA: METHODS, CHALLENGES AND LESSONS LEARNT <i>ELENA GARCÍA SÁNCHEZ, EASA</i>	
	CHANGE OF ROOMS ONLY	
09:30 - 11:00	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 4: UNCONVENTIONAL CONFIGURATIONS (2)	COMPUTATIONAL AEROELASTICITY 4
	COFFEE BREAK	
11:30 - 13:00	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 5: SUPERSONIC	STEADY/UNSTEADY AERODYNAMICS 1
	NETWORKING LUNCH & POSTER PRESENTATIONS	
14:15 - 16:15	REDUCED ORDER MODELLING 1	STEADY/UNSTEADY AERODYNAMICS 2
	COFFEE BREAK	
16:45 - 18:45	REDUCED ORDER MODELLING 2	STEADY/UNSTEADY AERODYNAMICS 3
	END OF SCIENTIFIC PROGRAMME DAY 2	
Day	18 JUNE 2026	
08:30 - 09:15	REDUCED COMPLEXITY: THE ESSENCE OF A COMPLEX JOURNEY INVOLVING LANGUAGE, MATHEMATICS, AND EMOTIONS <i>PASCAL LUBRINA, ONERA</i>	
	CHANGE OF ROOMS ONLY	
09:30 - 11:00	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 6: FOLDING WINGTIPS	DYNAMIC LOADS 1: BUFFET LOADS
	COFFEE BREAK	
11:30 - 13:00	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 7: DISTRIBUTED PROPULSION	DYNAMIC LOADS 2: GUST LOADS
	NETWORKING LUNCH & POSTER PRESENTATIONS	
14:15 - 15:45	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 8: METHODS AND FRAMEWORKS	DYNAMIC LOADS 3: SPECIAL LOADS
	COFFEE BREAK	
16:15 - 17:45	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 9: OPT. (2)	COMPUTATIONAL AEROELASTICITY 10
	CHANGE OF ROOMS ONLY	
18:00 - 18:30	CLOSING REMARKS	

# SESSION OVERVIEW

Building	CONFERENCE CENTRE „ALTE MENSA“ (GROUND FLOOR)		
Room	H. VOGT HALL	E. NOETHER HALL	ROOM TABERNA
Day	16 JUNE 2026		
09:00 - 09:45			
09:45 - 10:30			
	COFFEE BREAK		
11:00 - 13:00	WIND TUNNEL AND FLIGHT TESTING 1	AEROSERVOELASTICITY 1	EXPERIMENTAL METHODS IN STRUCTURAL DYNAMICS AND AEROELASTICITY 1
	NETWORKING LUNCH & POSTER PRESENTATIONS		
14:15 - 16:15	WIND TUNNEL AND FLIGHT TESTING 2	AEROSERVOELASTICITY 2	EXPERIMENTAL METHODS IN STRUCTURAL DYNAMICS AND AEROELASTICITY 2
	COFFEE BREAK		
16:45 - 18:45	WIND TUNNEL AND FLIGHT TESTING 3	ACTIVE CONTROL AND ADAPTIVE STRUCTURES 1	HIGH ALTITUDE PLATFORM (HAP)
	END OF SCIENTIFIC PROGRAMME DAY 1		
Day	17 JUNE 2026		
08:30 - 09:15			
	CHANGE OF ROOMS ONLY		
09:30 - 11:00	WIND TUNNEL AND FLIGHT TESTING 4	ACTIVE CONTROL AND ADAPTIVE STRUCTURES 2	HIGH FREQUENCY STRUCTURAL DYNAMICS & IMPACTS
	COFFEE BREAK		
11:30 - 13:00	WIND TUNNEL AND FLIGHT TESTING 5	AEROSERVOELASTICITY 3	ROTORCRAFT AEROELASTICITY 1
	NETWORKING LUNCH & POSTER PRESENTATIONS		
14:15 - 16:15	COMPUTATIONAL AEROELASTICITY 5	GROUND VIBRATION TESTING OF FLIGHT VEHICLES	ROTORCRAFT AEROELASTICITY 2
	COFFEE BREAK		
16:45 - 18:45	COMPUTATIONAL AEROELASTICITY 6	AEROSERVOELASTICITY 4	GENERAL TOPICS IN AEROELASTICITY
	END OF SCIENTIFIC PROGRAMME DAY 2		
Day	18 JUNE 2026		
08:30 - 09:15			
	CHANGE OF ROOMS ONLY		
09:30 - 11:00	COMPUTATIONAL AEROELASTICITY 7	AEROSERVOELASTICITY 5	ROTORCRAFT AEROELASTICITY 3
	COFFEE BREAK		
11:30 - 13:00	COMPUTATIONAL AEROELASTICITY 8	STEADY/UNSTEADY AERODYNAMICS 4	HIGHLY FLEXIBLE AIRCRAFT STRUCTURES
	NETWORKING LUNCH & POSTER PRESENTATIONS		
14:15 - 15:45	COMPUTATIONAL AEROELASTICITY 9	ACTIVE CONTROL AND ADAPTIVE STRUCTURES 3	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 10: OPT. (3)
	COFFEE BREAK		
16:15 - 17:45	COMPUTATIONAL AEROELASTICITY 11	FLIGHT VIBRATION SURVEY AND FLIGHT FLUTTER TEST	AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 11: OPT. (4)
	CHANGE OF ROOMS ONLY		
18:00 - 18:30			

TUESDAY, 16 JUNE 2026

0.1

TU, 16.6.  
09:45 - 10:30

PLENARY 1

CHAIR: L. TICHY, GERMAN AEROSPACE CENTER, DE

09:45 10:30 **REDUCED COMPLEXITY: THE ESSENCE OF A COMPLEX JOURNEY INVOLVING LANGUAGE, MATHEMATICS, AND EMOTIONS**  
WALT SILVA, EMERITUS LANGLEY ASSOCIATE

1.11

TU, 16.6.  
11:00 - 13:00

AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 1

CHAIR: E. GARRIGUES, DASSAULT

ASSEMBLY HALL - AUDITORIUM

11:00 11:30 0205 **AIRCRAFT-LEVEL AEROELASTIC OPTIMIZATION USING GLOBAL-LOCAL STRUCTURAL MODELING**  
S. KILIMTZIDIS<sup>1</sup>, D. ZAMANI<sup>2</sup>, A. PAGANI<sup>2</sup>, G. DIMITRIADIS, UNIVERSITY OF LIÈGE, BE; V. KOSTOPOULOS<sup>1</sup>, S. PSARRAS<sup>1</sup>; <sup>1</sup>UNIVERSITY OF PATRAS, GR; <sup>2</sup>POLITECNICO DI TORINO, IT

11:30 12:00 0312 **INFLUENCE OF MATERIAL PROPERTIES ON THE AEROELASTIC RESPONSE OF A T-TAIL LAMINATED COMPOSITE STRUCTURE**  
G. COMAND<sup>1</sup>, A. VINCENTI<sup>1</sup>, J.-C. CHASSAING<sup>1</sup>; <sup>1</sup>SORBONNE UNIVERSITÉ, CNRS, FR

12:00 12:30 0032 **AN EFFICIENT GEOMETRICALLY NONLINEAR AEROELASTIC FRAMEWORK FOR GRADIENT-BASED AEROELASTIC OPTIMIZATION**  
C. A. LUPP<sup>1</sup>, H. A. SMITH<sup>1</sup>; <sup>1</sup>AIR FORCE RESEARCH LABORATORY, US

12:30 13:00 0245 **LOCAL OPTIMIZATION MODEL REFINEMENT FOR THE PRELIMINARY AEROELASTIC STRUCTURAL DESIGN OF A TRANSPORT AIRCRAFT WING**  
M. SCHULZE<sup>1</sup>, T. KLIMMEK<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), DE

1.12

TU, 16.6.  
11:00 - 13:00

COMPUTATIONAL AEROELASTICITY 1

CHAIR: C. LIAUZUN, ONERA

ALTE MENSA - V.TROTT HALL (1ST FLOOR)

11:00 11:30 0083 **NONLINEAR ANALYSIS OF A DAMPED PITCH-HEAVE AEROELASTIC SYSTEM WITH STRUCTURAL NONLINEARITY**  
AMANDA PERRONI<sup>1</sup>, MARCELA PELLEGRINI<sup>1</sup>, MICHELLE WESTIN<sup>1</sup>, XINTIAN CHI<sup>2</sup>, DHEERAJ TRIPATHI<sup>2</sup>, BRANO TITURUS<sup>2</sup>, DJAMEL REZGUI<sup>2</sup>; <sup>1</sup>EMBRAER SA, BR; <sup>2</sup>UNIVERSITY OF BRISTOL, GB

11:30 12:00 0084 **NONLINEAR AEROELASTIC SIMULATIONS OF A QUADRATIC DAMPER WITH FREEPLAY IN A 3-DOF TYPICAL SECTION**  
MICHELLE WESTIN, EMBRAER SA, BR

12:00 12:30 0167 **LIMIT CYCLE OSCILLATION PREDICTIONS USING THE HARMONIC BALANCE METHOD AND THE NONLINEAR SOURCE AND DOUBLET PANEL METHOD**  
G. DIMITRIADIS, UNIVERSITY OF LIEGE, BE; V. LARASPATA<sup>1</sup>, L. SORIA<sup>1</sup>; <sup>1</sup>POLITECNICO DI BARI, IT

12:30 13:00 0207 **PREDICTION OF FREEPLAY-INDUCED AEROELASTIC LIMIT CYCLE OSCILLATIONS USING THE LOEWNER FRAMEWORK**  
D. QUERO<sup>1</sup>, C. KAISER<sup>1</sup>, DIANA MATAS RUIZ<sup>1</sup>, V. MOTTA, AIRBUS DEFENCE AND SPACE, DE; <sup>1</sup>DLR, DE

Status: 29 May 2026 - Subject to time & title changes - Presentation is based on information provided by the authors.

**1.13**  
TU, 16.6.  
11:00 - 13:00

**WIND TUNNEL AND FLIGHT TESTING 1**  
CHAIR: M. BRAUNE, DLR

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 11:00 11:30 0184 **EXPERIMENTAL ASSESSMENT OF GUST LOAD ALLEVIATION TECHNOLOGIES FOR HIGH ASPECT RATIO ULTRA EFFICIENT REGIONAL A/C. WING**  
*GIOVANNI MARCO CAROSSA<sup>1</sup>, ELENA RONCOLINI<sup>1</sup>, FRANCESCO TOFFOL<sup>1</sup>, ANDREA DE MEDA<sup>1</sup>, SERGIO RICCI<sup>1</sup>; <sup>1</sup>POLITECNICO DI MILANO, IT*
- 11:30 12:00 0152 **EXPERIMENTAL WIND TUNNEL TESTING OF A REINFORCEMENT LEARNING BASED GUST LOAD ALLEVIATION SYSTEM ON A FLEXIBLE WING**  
*RAMESH KONATALA<sup>1</sup>, FELIX STALLA<sup>1</sup>, GERTJAN LOOYE<sup>1</sup>, THOMAS G. SCHMIDT<sup>1</sup>, LUKAS KOIDA<sup>1</sup>, CHARLOTTE HANKE<sup>1</sup>, ERIK-JAN VAN KAMPEN, DELFT UNIVERSITY OF TECHNOLOGY, NL; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), DE*
- 12:00 12:30 0204 **DIRECTLY-PHYSICAL SUBSPACE IDENTIFICATION FOR STRUCTURE-PRESERVING AEROSERVOELASTIC MODEL UPDATING**  
*ÖZGE SÜELÖZGEN<sup>1</sup>, KEITH SOAL<sup>1</sup>, FELIX STALLA<sup>1</sup>, THIEMO KIER<sup>1</sup>, GERTJAN LOOYE<sup>1</sup>; <sup>1</sup>DLR, DE*
- 12:30 13:00 0139 **DYNAMIC RESPONSE ANALYSIS OF AN EVTOL VEHICLE USING GVT-DERIVED STATE-SPACE MODELLING**  
*F. SALTARI<sup>1</sup>, F. MASTRODDI<sup>1</sup>, L. PUSTINA<sup>1</sup>, MARCUS MUNIZ<sup>2</sup>, ADRIANO ARGIOLAS<sup>2</sup>; <sup>1</sup>SAPIENZA UNIVERSITÀ DI ROMA, IT; <sup>2</sup>VERTICAL AEROSPACE GROUP LTD, GB  
**PRESENTED BY:** A. ARGIOLAS, VERTICAL AEROSPACE GROUP LTD*

**1.14**  
TU, 16.6.  
11:00 - 13:00

**AEROSERVOELASTICITY 1**  
CHAIR: J. SEELEY, BAE SYSTEMS

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 11:00 11:30 0085 **VALIDATION OF A LFD BASED WORKFLOW FOR ACTIVE DAMPING AUGMENTATION USING EXPERIMENTAL DATA**  
*B. MICHELI<sup>1</sup>, R. VOLKMAR<sup>1</sup>, K. SOAL<sup>1</sup>, M. TANG<sup>1</sup>, C. KAISER<sup>1</sup>, M. BÖSWALD<sup>1</sup>; <sup>1</sup>DLR, DE*
- 11:30 12:00 0082 **SENSITIVITY ANALYSIS OF STRUCTURAL-AERODYNAMIC SENSOR FUSION CONFIGURATION FOR ACTIVE FLUTTER SUPPRESSION**  
*K LAY<sup>1</sup>, C RISO<sup>1</sup>, J RAULEDER<sup>1</sup>; <sup>1</sup>GEORGIA INSTITUTE OF TECHNOLOGY, US*
- 12:00 12:30 0065 **ACTUATOR-FRIENDLY FLUTTER CONTROL DESIGN UTILIZING ROBUST CONTROL AND BLENDING OF INPUTS AND OUTPUTS**  
*T. STROTHTEICHER<sup>1</sup>, N. FEZANS<sup>1</sup>, B. MICHELI, DLR INSTITUTE OF AEROELASTICITY, DE; <sup>1</sup>DLR INSTITUTE OF FLIGHT SYSTEMS, DE*
- 12:30 13:00 0285 **LPV-BASED CO-DESIGN OF BASELINE FLIGHT CONTROL AND ACTIVE FLUTTER SUPPRESSION WITH CONTROL SURFACE SIZE OPTIMIZATION**  
*ZS. WERMESER<sup>1</sup>, T. LUSPAY<sup>1</sup>, B. VANEK<sup>1</sup>, B. TAKARICS<sup>1</sup>; <sup>1</sup>HUN-REN INSTITUTE FOR COMPUTER SCIENCE AND CONTROL, HU*

<b>1.15</b> TU, 16.6. 11:00 - 13:00	<b>EXPERIMENTAL METHODS IN STRUCTURAL DYNAMICS AND AEROELASTICITY 1</b> CHAIR: A. LINDERHOLT	<b>ALTE MENSA - ROOM TABERNA (GROUND FLOOR)</b>
---	---	---

11:00 11:30 0212 **UNCERTAINTY QUANTIFICATION IN MODAL SHAPE SENSING OF A HIGH-ASPECT-RATIO WING**  
J. GUNDLACH<sup>1</sup>, J. M. LEDO DA CUNHA<sup>1</sup>, R. VOLKMAR<sup>1</sup>, M. BÖSWALD<sup>1</sup>, K. SOAL<sup>1</sup>, P. KOBER<sup>1</sup>, J. SODJA, DELFT UNIVERSITY OF TECHNOLOGY, NL; <sup>1</sup>GERMAN AEROSPACE CENTER, DE

11:30 12:00 0223 **EXPERIMENTAL IDENTIFICATION OF MODAL PARAMETERS IN A SEMI AEROELASTIC HINGED WING DEMONSTRATOR**  
J.M. LEDO DA CUNHA<sup>1</sup>, R. VOLKMAR<sup>1</sup>, J. GUNDLACH<sup>1</sup>, K. SOAL<sup>1</sup>, M. BÖSWALD<sup>1</sup>, J. SODJA, DELFT UNIVERSITY OF TECHNOLOGY, NL; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), INSTITUTE OF AEROELASTICITY, DE

12:00 12:30 0117 **EXPERIMENTAL INVESTIGATION OF A WHIRL FLUTTER USING NOVEL 2 DOF SMALL-SCALE ROTOR-PYLON RIG**  
A. PETKOV<sup>1</sup>, Y. QIU<sup>1</sup>, D.A.W. BARTON<sup>1</sup>, D. REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB

12:30 13:00 0280 **EXPERIMENTAL INVESTIGATION ON THE EFFECT OF PROPELLER PLACEMENT ON THE AEROELASTIC BEHAVIOUR OF FLEXIBLE WINGS**  
A. PONTILLO, UNIVERSITY OF THE WEST OF ENGLAND, UWE BRISTOL, GB; G. DESSENA, UNIVERSIDAD CARLOS III DE MADRID, ES

<b>2.11</b> TU, 16.6. 14:15 - 16:15	<b>AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 2: UNCONVENTIONAL CONFIGURATIONS (1)</b> CHAIR: W. KRÜGER, DLR	<b>ASSEMBLY HALL - AUDITORIUM</b>
---	---	-----------------------------------

14:15 14:45 0214 **EFFECTS OF ELASTICITY ON AEROELASTIC-FLIGHT-DYNAMIC CHARACTERISTICS OF FLYING WING AIRCRAFT**  
J. ZHOU<sup>1</sup>, M. LEI<sup>1</sup>, S. HE<sup>1</sup>, Y. GU<sup>1</sup>; <sup>1</sup>SCHOOL OF AERONAUTICS, NORTHWESTERN POLYTECHNICAL UNIVERSITY, CN

14:45 15:15 0037 **SHAPE AND SIZING AEROELASTIC GUST OPTIMIZATION OF A X-56 PLANFORM WITH STRESS CONSTRAINTS**  
J DESLICH<sup>1</sup>, H SMITH<sup>1</sup>, C LUPP<sup>1</sup>, R KOLONAY<sup>1</sup>, M RUMPFKEIL, UNIVERSITY OF DAYTON, US; <sup>1</sup>AIR FORCE RESEARCH LABORATORY, US

15:15 15:45 0111 **INVESTIGATION OF NON-LINEAR STRUCTURAL DYNAMICS AND AEROELASTIC PROPERTIES OF STRUT-BRACED WINGS IN A CONCEPTUAL DESIGN**  
D.J. COLOMBO-ACQUARONE<sup>1</sup>, W.R. KRÜGER<sup>1</sup>; <sup>1</sup>DEUTSCHES ZENTRUM FÜR LUFT- UND RAUMFAHRT, DE

15:45 16:15 0153 **NONLINEAR AEROELASTICITY OF STRUT-BRACED HIGH ASPECT RATIO WINGS**  
F.M. FAHED MOHD, GB; M.A. MOHAMMADREZA AMOOZGAR, GB; S.M. STEWART MCWILLIAM, GB; N.G. NICOLAS LEONARD GARRIDO, GB **PRESENTED BY: GARRIDO**

**2.12**  
TU, 16.6.  
14:15 - 16:15

**COMPUTATIONAL AEROELASTICITY 2**  
CHAIR: C. LIAUZUN, ONERA

ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)

- 14:15 14:45 0020 **TRANSONIC AEROELASTIC ANALYSIS OF THE X-59 AIRCRAFT USING FUN3D**  
*M.D. SANETRIK<sup>1</sup>, W.D. LI<sup>1</sup>, S. LUNG<sup>1</sup>, B.C. PARK<sup>1</sup>; <sup>1</sup>NASA, US*
- 14:45 15:15 0216 **NONLINEAR AEROELASTIC SIMULATIONS OF LOW-BOOM SUPERSONIC TRANSPORT AIRCRAFT**  
*SONEDA KENSUKE, JAPAN AEROSPACE EXPLORATION AGENCY, JP; SAITOH KENICHI, JAPAN AEROSPACE EXPLORATION AGENCY, JP*
- 15:15 15:45 0060 **FLUTTER ANALYSIS OF MISSILE CONFIGURATIONS AT TRANSONIC SPEEDS BY THE NOT-SO-SLENDER WING/BODY THEORY**  
*M. CHIMENO MANGUÁN<sup>1</sup>, P. GARCÍA-FOGEDA<sup>1</sup>, K. SALEHI PANIAGUA<sup>1</sup>; <sup>1</sup>UNIVERSIDAD POLITÉCNICA DE MADRID, ES*
- 15:45 16:15 0019 **FULLY COUPLED CFD-FEM ANALYSIS OF THE HYMAX GEOMETRY MODIFIED TO INDUCE FLUTTER**  
*T.Y. XU<sup>1</sup>, E.H. DOWELL<sup>1</sup>; <sup>1</sup>DUKE UNIVERSITY, US*

**2.13**  
TU, 16.6.  
14:15 - 16:15

**WIND TUNNEL AND FLIGHT TESTING 2**  
CHAIR: M. BRAUNE, DLR

ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)

- 14:15 14:45 0233 **UNSTEADY PRESSURE AND DEFORMATION MEASUREMENTS USING PSP AT THE ONSET OF LIMIT CYCLE FLUTTER**  
*K. SAITOH<sup>1</sup>, T. NAKAJIMA<sup>1</sup>, H. IWAMOTO, ISE, JP; <sup>1</sup>JAXA, JP*
- 14:45 15:15 0291 **"SHIFT THE DIP" — AEROELASTIC EFFECTS OF SHOCK-CONTROL BUMPS ON A SUPERCRITICAL AIRFOIL IN TRANSONIC FLOW**  
*ANNA ALTKUCKATZ<sup>1</sup>, MARC BRAUNE<sup>1</sup>, DAISUKE YORITA<sup>1</sup>; <sup>1</sup>DLR, DE*
- 15:15 15:45 0265 **DESIGN OF A SWEEPED WING MODEL FOR THE INVESTIGATION OF SEMI-ACTIVE FLUTTER SUPPRESSION IN TRANSONIC FLOW**  
*J. NITZSCHE<sup>1</sup>, J. DILLINGER<sup>1</sup>, D. FRIEDEWALD<sup>1</sup>, J. HIMISCH, INSTITUTE OF AERODYNAMICS, GERMAN AEROSPACE CENTER (DLR), DE; M. SCHMIDT, SYSTEMHAUS TECHNIK, GERMAN AEROSPACE CENTER (DLR), DE; <sup>1</sup>INSTITUTE OF AEROELASTICITY, GERMAN AEROSPACE CENTER (DLR), DE*
- 15:45 16:15 0281 **AERODYNAMIC AND AEROELASTIC CHARACTERIZATION OF A FORWARD-SWEEPED, LAMINAR AIRCRAFT WING UNDER REALISTIC FLIGHT CONDITIONS**  
*T. G. SCHMIDT<sup>1</sup>, A. ALTKUCKATZ<sup>1</sup>, M. FEHRS<sup>1</sup>, M. BRAUNE<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR) - INSTITUTE OF AEROELASTICITY, DE*

2.14		AEROSERVOELASTICITY 2	ALTE MENSA - E.NOETHER HALL (GROUND FLOOR)
TU, 16.6. 14:15 - 16:15		CHAIR: J. SEELEY, BAE SYSTEMS	
14:15	14:45	0086 <b>GUST LOAD ALLEVIATION FOR HIGHLY FLEXIBLE AIRCRAFT IN AN INTEGRATED AEROELASTIC AND FLIGHT DYNAMIC FRAMEWORK</b> <i>MARIYAM NASEER<sup>1</sup>, HAROON AWAIS BALUCH<sup>1</sup>; <sup>1</sup>NSTP, NUST, PK</i>	
14:45	15:15	0028 <b>MANEUVER LOAD ALLEVIATION FUNCTION DESIGN EMPLOYING A LOAD ESTIMATOR</b> <i>M. LOPES SILVA<sup>1</sup>, R. VERNAY<sup>1</sup>, H. BOUZOUITA<sup>1</sup>, V. POMMIER-BUDINGER<sup>2</sup>, YVES BRIERE<sup>2</sup>; <sup>1</sup>AIRBUS OPERATIONS SAS, FR; <sup>2</sup>ISAE-SUPAERO, FR</i>	
15:15	15:45	0208 <b>MODEL PREDICTIVE CONTROL WITH ADAPTIVE PREDICTION HORIZON FOR LOAD ALLEVIATION IN VERY FLEXIBLE AIRCRAFT</b> <i>J. CAVALCANTI<sup>1</sup>, I. KOLMANOVSKY<sup>1</sup>, C. E. S. CESNIK<sup>1</sup>; <sup>1</sup>UNIVERSITY OF MICHIGAN, US</i>	
15:45	16:15	0284 <b>ACTIVE GUST LOAD ALLEVIATION ON A FULL-SCALE AIRCRAFT WING USING AN ADAPTIVE FOLDING WINGTIP MECHANISM</b> <i>D. ASADI, UWE BRISTOL, GB; M. AHMADI<sup>1</sup>, T. FARSADI<sup>1</sup>, H. C. ÖNEL<sup>1</sup>, A. KAYRAN, MIDDLE EAST TECHNICAL UNIVERSITY, TR; H. HADDAD KHODAPARAST, SWANSEA UNIVERSITY, GB; <sup>1</sup>ADANA ALPARSLAN TÜRKİYE SCIENCE AND TECHNOLOGY UNIVERSITY, TR; <b>PRESENTED BY:</b> D. A. ASADI, UWE BRISTOL</i>	
2.15		EXPERIMENTAL METHODS IN STRUCTURAL DYNAMICS AND AEROELASTICITY 2	ALTE MENSA - ROOM TABERNA (GROUND FLOOR)
TU, 16.6. 14:15 - 16:15		CHAIR: A. LINDERHOLT, LINNAEUS UNIVERSITY	
14:15	14:45	0162 <b>CFD-BASED RECONSTRUCTION OF IN-FLIGHT AERODYNAMIC LOADS ON A DASSAULT FALCON 8X</b> <i>M. CHEIKH<sup>1</sup>, V. FLEURY<sup>1</sup>, N. FORESTIER<sup>1</sup>, S. KLEINVELD<sup>1</sup>, E. GARRIGUES<sup>1</sup>, A. MERLET<sup>1</sup>; <sup>1</sup>DASSAULT AVIATION, FR</i>	
14:45	15:15	0269 <b>EXPERIMENTAL BENCHMARK WING-BOX WITH ADJUSTABLE STIFFNESS AND CONTROLLED NONLINEARITIES FOR STRUCTURAL DYNAMICS</b> <i>I. GAL<sup>1</sup>, S. FICHERA<sup>1</sup>, J. E. MOTTERSHEAD<sup>1</sup>; <sup>1</sup>UNIVERSITY OF LIVERPOOL, GB</i>	
15:15	15:45	0088 <b>DEVELOPMENT OF AEROELASTIC PITCH-HEAVE WING TEST RIG WITH NONLINEAR DAMPER-FREEPLAY MECHANISM</b> <i>X. CHI<sup>1</sup>, D. TRIPATHI<sup>1</sup>, A. PERRONI<sup>2</sup>, M. PELLEGRINI<sup>2</sup>, M. WESTIN<sup>2</sup>, B. CASTRO<sup>2</sup>, B. TITURUS<sup>1</sup>, D. REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB; <sup>2</sup>EMBRAER, BR</i>	
15:45	16:15	0109 <b>PHYSICS-INFORMED GROUND VEHICLE TEST MODE EXPANSION FOR FLUTTER ANALYSIS</b> <i>E.-C. CHUNG<sup>1</sup>, Y.-G. PARK<sup>1</sup>, S.-M. LEE<sup>1</sup>, S.-J. SHIN<sup>1</sup>; <sup>1</sup>SEOUL NATIONAL UNIVERSITY, KR</i>	

**3.11**  
TU, 16.6.  
16:45 - 18:45

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 3: FLUTTER/LCO**  
CHAIR: J. COOPER, UNIVERSITY OF BRISTOL

**ASSEMBLY HALL - AUDITORIUM**

16:45 17:15 0106 **FLUTTER SOLUTION METHODS UNDER UNCERTAINTIES OF THE JOBY EVTOL AIRCRAFT**  
*MICHELE CASTELLANI, JOBY AVIATION, US*

17:15 17:45 0148 **SDPMFLUT: AN OPEN-SOURCE UNSTEADY SOURCE AND DOUBLET PANEL METHOD FOR FLUTTER ANALYSIS**  
*G. DIMITRIADIS, UNIVERSITY OF LIEGE, BE*

17:45 18:15 0137 **PREDICTION OF LIMIT CYCLE OSCILLATIONS ON THE PAZY WING WITH MID-FIDELITY AERODYNAMIC METHODS**  
*A. BOVE<sup>1</sup>, G. QUARANTA<sup>1</sup>; <sup>1</sup>POLITECNICO DI MILANO, IT*

18:15 18:45 0159 **COUPLED NONLINEAR AEROELASTIC STABILITY OF WING-PROPELLER SYSTEMS**  
*A.A. ARYAV AIRY, GB; M.A. MOHAMMADREZA AMOOZGAR, GB; N.G. NICOLAS LEONARD GARRIDO, GB*  
**PRESENTED BY: N.G. GARRIDO**

**3.12**  
TU, 16.6.  
16:45 - 18:45

**COMPUTATIONAL AEROELASTICITY 3**  
CHAIR: H. HENNINGS, DLR

**ALTE MENSA - V.TROTT HALL (1ST FLOOR)**

16:45 17:15 0277 **AEROELASTIC OPTIMIZATION FOR DYNAMIC MODEL ADJUSTMENT BASED ON GROUND- / FLIGHT TEST DATA AND INCREASED STABILITY MARGIN**  
*W. R. KRÜGER, DLR GERMAN AEROSPACE CENTER, DE*

17:15 17:45 0027 **EFFICIENT COMPUTATION OF DESIGN DERIVATIVES FOR TIME-DOMAIN NONLINEAR AEROELASTIC SYSTEMS**  
*B PRESTON<sup>1</sup>, U FASEL<sup>1</sup>, R PALACIOS<sup>1</sup>, A CASTRICHINI, AIRBUS UK, GB; <sup>1</sup>IMPERIAL COLLEGE LONDON, GB*

17:45 18:15 0199 **SHAPE SENSITIVITY OF WING BOX PANELS IN AN AUTOMATED STRUCTURAL OPTIMIZATION SYSTEM (ASTROS)**  
*A. COFFING<sup>1</sup>, R. CANFIELD<sup>1</sup>, J. DESLICH, AIR FORCE RESEARCH LABORATORY, US; <sup>1</sup>VIRGINIA TECH, US*

18:15 18:45 0125 **AEROELASTIC TAILORING OF COMPOSITE LIFTING SURFACES BASED ON HIGH-FIDELITY MODELS**  
*E. CALIGARI, ALMA MATER STUDIORUM, UNIVERSITY OF BOLOGNA, IT; D. ZAMANI, POLITECNICO DI TORINO, IT*

**3.13**  
TU, 16.6.  
16:45 - 18:45

**WIND TUNNEL AND FLIGHT TESTING 3**  
CHAIR: C. CESNIK, UNIVERSITY OF MICHIGAN

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 16:45 17:15 0260 **WIND TUNNEL AEROELASTIC ANALYSIS OF A LOW-STIFFNESS WING AT HIGH ANGLES OF ATTACK AND LOW REYNOLDS NUMBERS**  
*M. DAGILIS<sup>1</sup>, M. LENDRAITIS<sup>1</sup>, S. KILIKEVICIUS<sup>1</sup>; <sup>1</sup>KAUNAS UNIVERSITY OF TECHNOLOGY, LT*
- 17:15 17:45 0275 **EXPERIMENTAL STUDY OF NONLINEAR AEROELASTIC RESPONSE IN A HIGHLY FLEXIBLE WING CONFIGURATION**  
*L. MARCHETTI<sup>1</sup>, F. HEALY<sup>1</sup>, D. REZGUI<sup>1</sup>, J.E. COOPER<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*
- 17:45 18:15 0243 **AEROELASTIC MODEL UPDATE FOR A FLEXIBLE WING USING EXPERIMENTAL DATA**  
*G. STAVORINUS<sup>1</sup>, P.J. GONZÁLEZ<sup>1</sup>, G.C. BARBOSA<sup>1</sup>, A.A.G. QUESADA<sup>1</sup>, F.J. SILVESTRE<sup>1</sup>, A. VOSS<sup>2</sup>, W. KRÜGER<sup>2</sup>; <sup>1</sup>TECHNICAL UNIVERSITY OF BERLIN, DE; <sup>2</sup>DLR- GERMAN AEROSPACE CENTER INSTITUTE OF AEROELASTICITY, DE*
- 18:15 18:45 0079 **EXPERIMENTAL BODY FREEDOM FLUTTER TEST CAMPAIGN OF AEROELASTICALLY SCALED X-56 WING**  
*K. MCHUGH, US; N. JONES, US; M. MONGIN, US; M. LEEVY, US; R.M. TAYLOR, US*

**3.14**  
TU, 16.6.  
16:45 - 18:45

**ACTIVE CONTROL AND ADAPTIVE STRUCTURES 1**  
CHAIR: F. ARÉVALO, AIRBUS

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 16:45 17:15 0068 **STRUCTURAL BLENDING FOR ACTIVE FLUTTER SUPPRESSION**  
*J. EICHELSDÖRFER, INSTITUTE OF AEROELASTICITY, GERMAN AEROSPACE CENTER (DLR), DE*
- 17:15 17:45 0191 **ADAPTIVE CONTROL LAW FOR ACTIVE FLUTTER SUPPRESSION IN PRESENCE OF ACTUATION FAILURE**  
*E. RONCOLINI<sup>1</sup>, G. M. CAROSSA<sup>1</sup>, F. TOFFOL<sup>1</sup>, S. RICCI<sup>1</sup>; <sup>1</sup>POLITECNICO DI MILANO, IT*
- 17:45 18:15 0301 **HYBRID ROBUST INCREMENTAL NONLINEAR CONTROL WITH GUARANTEED DISK MARGINS AND FLIGHT QUALITY FOR AEROELASTIC AIRCRAFT**  
*T. ZHANG, NL; X. WANG, NL; R. DE BREUKER, NL*
- 18:15 18:45 0235 **APPLICATION OF UDWADIA-KALABA METHOD TO FLARED FOLDING WING TIPS: A LOW ORDER EXPLICIT MODEL FOR NUMERICAL CONTINUATION**  
*J. H. ASCHAM<sup>1</sup>, M. H. LOWENBERG<sup>1</sup>, J. E. COOPER<sup>1</sup>, D. REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*

**3.15**  
TU, 16.6.  
16:45 - 18:45

**HIGH ALTITUDE PLATFORM (HAP)**  
CHAIR: M. RITTER, DLR

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 16:45 17:15 0014 **HAP-ALPHA: MODEL UPDATING BASED ON GROUND VIBRATION TEST AND THE INFLUENCE ON LOADS AND AEROELASTICITY**  
A. VOSS, DLR INSTITUTE OF AEROELASTICITY, DE; R BUCHBACH, DE; K. SOAL, DE; R VOLKMAR, DE; C. THIEM, DE; J. SINSKE, DE; J. GUNDLACH, DE; S. NIEMANN, DE
- 17:15 17:45 0276 **HAP-ALPHA: GROUND VIBRATION TEST OF THE ULTRA-LIGHTWEIGHT HIGH-ALTITUDE PLATFORM STRUCTURE**  
C. THIEM<sup>1</sup>, R. BUCHBACH<sup>1</sup>, A. VOSS<sup>1</sup>, J. SINSKE<sup>1</sup>, K.-I. SOAL<sup>1</sup>, M. TANG<sup>1</sup>, R. VOLKMAR<sup>1</sup>, J. GUNDLACH<sup>1</sup>, T. MEIER<sup>1</sup>; <sup>1</sup>DLR, DE
- 17:45 18:15 0210 **HAP-ALPHA: FLIGHT CONTROL DESIGN CONSIDERING STRUCTURE AND RIGID-BODY COUPLING**  
C. WEISER, DLR INSTITUTE OF FLIGHT SYSTEMS, DE; T.-M. KIER, DLR INSTITUTE OF AEROELASTICITY, DE  
**PRESENTED BY:** T.-M. KIER, DLR INSTITUTE OF AEROELASTICITY
- 18:15 18:45 0129 **HAP-ALPHA: DEVELOPMENT OF SYSTEM IDENTIFICATION MANOEUVRES FOR LOW-ALTITUDE FLIGHT TESTING OF A FLEXIBLE HAP**  
Y. J. HASAN<sup>1</sup>, A. VOSS, DLR INSTITUTE OF AEROELASTICITY, DE; C. RAAB<sup>1</sup>, N. FEZANS<sup>1</sup>; <sup>1</sup>DLR INSTITUTE OF FLIGHT SYSTEMS, DE

## WEDNESDAY, 17 JUNE 2026

**0.2**

WE, 17.6. **PLENARY 2**  
08:30 - 09:15  
CHAIR: L. TICHY, GERMAN AEROSPACE CENTER, DE

- 08:30 09:15 **AEROELASTIC CERTIFICATION WITH EASA: METHODS, CHALLENGES AND LESSONS LEARNT;**  
ELENA GARCIA SANCHEZ; EUROPEAN UNION AVIATION SAFETY AGENCY

**4.11**  
WE, 17.6.  
09:30 - 11:00

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 4: UNCONVENTIONAL CONFIGURATIONS (2)**  
CHAIR: W. KRÜGER, DLR

ASSEMBLY HALL -  
AUDITORIUM

- 09:30 10:00 0107 **COMPUTATIONAL FRAMEWORK FOR DYNAMIC LOADS ANALYSIS OF THE JOBY EVTOL AIRCRAFT**  
MICHELE CASTELLANI<sup>1</sup>, SEAN P. KELLEY<sup>1</sup>; <sup>1</sup>JOBY AVIATION, US
- 10:00 10:30 0058 **WING MOVABLE LAYOUT PARAMETERISATION – FROM CONTINUOUS OPTIMISED DOWNWASH TO DISCRETE MOVABLES**  
S. DE BOER<sup>1</sup>, R. DE BREUKER<sup>1</sup>, J. SODJA<sup>1</sup>; <sup>1</sup>DELFT UNIVERSITY OF TECHNOLOGY FACULTY OF AEROSPACE ENGINEERING, NL
- 10:30 11:00 0164 **AERODYNAMIC CHARACTERISTICS ANALYSIS OF BIO-INSPIRED FLYING FISH MEMBRANE WINGS CONSIDERING STATIC AEROELASTIC EFFECTS**  
M. ZHOU<sup>1</sup>, Z. WU<sup>1</sup>, C. YANG<sup>1</sup>; <sup>1</sup>SCHOOL OF AERONAUTIC SCIENCE AND ENGINEERING, BEIHANG UNIVERSITY, CN

Status: 29 May 2026 - Subject to time & title changes - Presentation is based on information provided by the authors.

**4.12**  
WE, 17.6.  
09:30 - 11:00

**COMPUTATIONAL AEROELASTICITY 4**  
CHAIR: H. HENNINGS, DLR

**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

- 09:30 10:00 0224 **TAIL BUFFETING OF A FLEXIBLE WING IN TRANSONIC FLOW**  
*ADITHYA UDUPA<sup>1</sup>, VELLAISAMY DINU<sup>1</sup>, U P V SUDHA, ADA, IN; <sup>1</sup>IISC, IN*
- 10:00 10:30 0118 **INVESTIGATION OF BUFFET AND BUFFETING CHARACTERISTICS IN BENCHMARK SUPERCRITICAL WING CONSIDERING AEROELASTIC EFFECTS**  
*YUMING ZHANG<sup>1</sup>, YUTING DAI<sup>1</sup>, CHAO YANG<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 10:30 11:00 0302 **DEVELOPMENT OF THE FIRST-PRINCIPLES ADAPTIVE EULER METHODOLOGY TO FSI AND BUFFETING**  
*JOHAN JANSSON, KTH ROYAL INSTITUTE OF TECHNOLOGY, SE; KRISTOFFER WINGSTEDT<sup>1</sup>, SUSANNE CLAUS, ONERA, FR; ANDERS KARLSSON<sup>2</sup>, PÅR GUSTAFSSON<sup>2</sup>, ERIK SÄTERS KOG<sup>2</sup>, OLIVIER AMOIGNON<sup>1</sup>, CHRISTIAN HELANOW<sup>1</sup>; <sup>1</sup>FOI, SE; <sup>2</sup>SAAB AB, SE*

**4.13**  
WE, 17.6.  
09:30 - 11:00

**WIND TUNNEL AND FLIGHT TESTING 4**  
CHAIR: A. LAPORTE, AIRBUS

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 09:30 10:00 0013 **EXPERIMENTAL INVESTIGATION OF WHIRL FLUTTER STABILITY AND PROPELLER AERODYNAMIC DERIVATIVES**  
*J. CECRDLE<sup>1</sup>, O. VICH<sup>1</sup>, R. KULHANEK<sup>1</sup>; <sup>1</sup>VZLU AEROSPACE, CZ*
- 10:00 10:30 0092 **EXPERIMENTAL INVESTIGATION OF VERTICAL TAIL BUFFETING ON A TRIPLE-DELTA-WING CONFIGURATION IN TRANSONIC FLOWS**  
*P. HARTL<sup>1</sup>, T. G. SCHMIDT<sup>1</sup>, A. ALTKUCKATZ<sup>1</sup>, L. KOIDA<sup>1</sup>, C. HANKE<sup>1</sup>, T. BÜTE<sup>1</sup>, H. ERNST<sup>1</sup>, H. BÖHLKEN<sup>1</sup>, M. BRAUNE<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), INSTITUTE OF AEROELASTICITY, DE*
- 10:30 11:00 0038 **MACH 6 AEROTHERMOELASTIC EXPERIMENT WITH SHOCK IMPINGEMENT ON A COMPLIANT PANEL UNDER THERMAL AND MECHANICAL BUCKLING**  
*D.O. KIRKPATRICK<sup>1</sup>, D.D. DOONER<sup>1</sup>, A.J. NEELY<sup>1</sup>, C.M. HOKE<sup>1</sup>, T.J. BEBERNISS, AIR FORCE RESEARCH LABORATORY, US; D.R. BUTTSWORTH, UNIVERSITY OF SOUTHERN QUEENSLAND, AU; <sup>1</sup>UNIVERSITY OF NEW SOUTH WALES, AU; **PRESENTED BY:** D.D. DOONER, UNIVERSITY OF NEW SOUTH WALES*

**4.14**  
WE, 17.6.  
09:30 - 11:00

**ACTIVE CONTROL AND ADAPTIVE STRUCTURES 2**  
CHAIR: F. ARÉVALO, AIRBUS

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 09:30 10:00 0161 **ACTIVE WING FOR FUTURE REGIONAL AIRCRAFT: MORPHING STRUCTURES AND AEROELASTIC CONTROL**  
*FRANCESCO TOFFOL<sup>1</sup>, VITTORIO CAVALIERI<sup>1</sup>, ALESSANDRO DE GASPARI<sup>1</sup>, SERGIO RICCI<sup>1</sup>; <sup>1</sup>POLITECNICO DI MILANO, IT*
- 10:00 10:30 0158 **EXPERIMENTAL TESTING OF A HIGH-BANDWIDTH MORPHING AILERON FOR A HYBRID ELECTRIC REGIONAL AIRCRAFT**  
*V. CAVALIERI<sup>1</sup>, M. MADDONINI<sup>1</sup>, A. DE GASPARI<sup>1</sup>, S. RICCI<sup>1</sup>; <sup>1</sup>POLITECNICO DI MILANO, IT*
- 10:30 11:00 0254 **EXPERIMENTAL CHARACTERISATION OF PROTOTYPE WING FOR REFLEXED AIRFOIL MORPHING**  
*PANAGIOTIS GEORGOPOULOS<sup>1</sup>, JURIJ SODJA<sup>1</sup>, ROELAND DE BREUKER<sup>1</sup>; <sup>1</sup>TU DELFT, FACULTY OF AEROSPACE ENGINEERING, NL*

**4.15**  
WE, 17.6.  
09:30 - 11:00

**HIGH FREQUENCY STRUCTURAL DYNAMICS & IMPACTS**  
CHAIR: C. AQUILINI, AIRBUS

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 09:30 10:00 0213 **SURVEY OF AVIATION BIRD STRIKE HAZARD AND ITS NUMERICAL SIMULATION**  
*H CLIMENT, UC3M, ES; T CASILLAS, AIRBUS DEFENCE AND SPACE, ES; A MARTINEZ, ICEMM, ES; M HIDALGO<sup>1</sup>, B GARCIA<sup>1</sup>; <sup>1</sup>CT INGENIEROS, ES*
- 10:00 10:30 0215 **VIBROACOUSTIC COMPUTATION OF A BUSINESS AIRCRAFT FUSELAGE AREA**  
*C. ROUSSET<sup>1</sup>, Y. REVALOR<sup>1</sup>, M. CHEIKH<sup>1</sup>, E. GARRIGUES<sup>1</sup>; <sup>1</sup>DASSAULT AVIATION, FR*
- 10:30 11:00 0103 **HIGH-RATE TESTING AND MODELLING OF AEROSPACE LAP-SHEAR FASTENER JOINTS USING A SPLIT HOPKINSON TENSION BAR**  
*FREDRIK LARSSON<sup>1</sup>, PER PERSSON, SAAB AERONAUTICS, SE; JÖRGEN KAJBERG<sup>1</sup>; <sup>1</sup>LULEÅ UNIVERSITY OF TECHNOLOGY, SE; **PRESENTED BY:** LARSSON, LULEÅ UNIVERSITY OF TECHNOLOGY*

**5.11**  
WE, 17.6.  
11:30 - 13:00

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 5: SUPERSONIC**  
CHAIR: M. OLIVER, AIRBUS

ASSEMBLY HALL -  
AUDITORIUM

- 11:30 12:00 0104 **LOW-ORDER MULTIDISCIPLINARY MODELING OF HYPERSONIC VEHICLES WITH COUPLED AEROELASTIC AND AERO-PROPULSIVE EFFECTS**  
*J. CAVALCANTI, INSTITUTE FOR ADVANCED STUDIES, BR; R. G. A. SILVA, AERONAUTICS INSTITUTE OF TECHNOLOGY, BR*
- 12:00 12:30 0120 **AEROTHERMOELASTIC COUPLING EFFECTS ON SUPERSONIC AIRCRAFT FLIGHT DYNAMICS**  
*G. Z. WANG<sup>1</sup>, C. Y. LIU, BEIJING INSTITUTE OF ASTRONAUTICAL SYSTEMS ENGINEERING, CN; R. XUE, COMAC BEIJING AIRCRAFT TECHNOLOGY RESEARCH INSTITUTE, CN; C. C. XIE<sup>1</sup>, C. AN<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 12:30 13:00 0105 **PRELIMINARY STRUCTURAL DESIGN TOOL FOR FLEXIBLE SLENDER BODIES WITH AEROELASTIC CONSTRAINTS**  
*Y. KARNIEL<sup>1</sup>, D. E. RAVEH<sup>1</sup>; <sup>1</sup>TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY, IL*

**5.12**  
WE, 17.6.  
11:30 - 13:00

**STEADY/UNSTEADY AERODYNAMICS 1**  
CHAIR: S. RUEGAMER, BOING

ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)

- 11:30 12:00 0138 **A TIME-DOMAIN PANEL METHOD FOR UNSTEADY SUBSONIC COMPRESSIBLE AERODYNAMICS**  
*D WEN<sup>1</sup>, Z WU<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 12:00 12:30 0273 **INVESTIGATION OF A VORTEX-BASED THREE-DIMENSIONAL CORRECTION FOR UNSTEADY EFFECTS IN THE ACTUATOR LINE METHOD**  
*F. E. C. SILVA<sup>1</sup>, V. G. KLEINE<sup>1</sup>, A. B. GUIMARÃES NETO<sup>1</sup>; <sup>1</sup>INTITUTO TECNOLÓGICO DE AERONÁUTICA, BR*
- 12:30 13:00 0313 **A MULTI-FIDELITY NEURAL NETWORK FRAMEWORK FOR ENHANCING STRIP-THEORY AERODYNAMICS**  
*V. B. SANTOS<sup>1</sup>, F. L. CARDOSO-RIBEIRO<sup>1</sup>, A. A. G. QUESADA<sup>2</sup>, P. J. GONZÁLEZ<sup>2</sup>, F. J. SILVESTRE<sup>2</sup>, W. R. KRÜGER, GERMAN AEROSPACE CENTER, DE; H. SPÄTH<sup>3</sup>, Z. DAW<sup>3</sup>; <sup>1</sup>AERONAUTICS INSTITUTE OF TECHNOLOGY, BR; <sup>2</sup>TECHNICAL UNIVERSITY OF BERLIN, DE; <sup>3</sup>UNIVERSITY OF STUTTGART, DE*

**5.13**  
WE, 17.6.  
11:30 - 13:00

**WIND TUNNEL AND FLIGHT TESTING 5**  
CHAIR: A. LAPORTE, AIRBUS

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 11:30 12:00 0101 **CONTINUOUS ONLINE MONITORING OF AEROELASTIC MODAL PARAMETERS: A COMPREHENSIVE STUDY OF WIND TUNNEL AND FLIGHT TESTS**  
*R. VOLKMAR<sup>1</sup>, K. I. SOAL<sup>1</sup>, M. BÖSWALD<sup>1</sup>; <sup>1</sup>DLR, DE*
- 12:00 12:30 0241 **GROUND EXPERIMENTAL TESTS AND FLIGHT TEST DESIGN FOR A FLEXIBLE AIRCRAFT FLYING DEMONSTRATOR**  
*P. J. GONZÁLEZ<sup>1</sup>, G. C. BARBOSA<sup>1</sup>, Á. A. G. QUESADA<sup>1</sup>, G. STAVORINUS<sup>1</sup>, F. J. SILVESTRE<sup>1</sup>, W. R. KRÜGER, DLR, DE; <sup>1</sup>TU-BERLIN, DE*
- 12:30 13:00 0044 **THE X-59 JOURNEY TO AEROELASTIC AIRWORTHINESS CLEARANCE**  
*N. SPIVEY<sup>1</sup>, M. BOUCHER<sup>1</sup>, B. PARK<sup>1</sup>, C. PAK<sup>1</sup>, W. SILVA<sup>2</sup>, M. SANETRIK<sup>2</sup>, J. NEWSOM<sup>2</sup>, S. LUNG, PEERLESS TECHNOLOGIES CORP, US; D. BOYCE<sup>3</sup>, P. S. ZINK<sup>3</sup>, A. SIMONS<sup>3</sup>; <sup>1</sup>NASA ARMSTRONG FLIGHT RESEARCH CENTER, US; <sup>2</sup>NASA LANGLEY RESEARCH CENTER, US; <sup>3</sup>LOCKHEED MARTIN AERONAUTICS COMPANY, US*

**5.14**  
WE, 17.6.  
11:30 - 13:00

**AEROSERVOELASTICITY 3**  
CHAIR: R. DE BREUKER, TU DELFT

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 11:30 12:00 0078 **EIGENVALUE SENSITIVITY ANALYSIS FOR AEROSERVOELASTIC CONTROL CO-DESIGN**  
*N. JOANOW<sup>1</sup>, N. BAJAJ<sup>1</sup>, K. MCHUGH, U.S. AIR FORCE RESEARCH LABORATORY, US; <sup>1</sup>UNIVERSITY OF PITTSBURGH, US*
- 12:00 12:30 0200 **HIGH-DIMENSIONAL BAYESIAN CONTROL CO-DESIGN OPTIMISATION FOR CONSTRAINED AEROELASTIC TAILORING OF FLEXIBLE AIRCRAFT**  
*J.R. VAN ZYL<sup>1</sup>, H.F. MAATHUIS<sup>1</sup>, R. DE BREUKER<sup>1</sup>, X. WANG<sup>1</sup>; <sup>1</sup>DELFT UNIVERSITY OF TECHNOLOGY, NL*
- 12:30 13:00 0049 **ATTACHED SHOCK DYNAMICS OVER OSCILLATING AIRFOILS**  
*K. PATEL<sup>1</sup>, D. LEFAS<sup>1</sup>; <sup>1</sup>UNIVERSITY OF CAMBRIDGE, GB*

**5.15**  
WE, 17.6.  
11:30 - 13:00

**ROTORCRAFT AEROELASTICITY 1**  
CHAIR: M. FRUMUSA, LEONARDO

**ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)**

- 11:30 12:00 0087 **NONLINEAR AEROELASTIC ANALYSIS OF ROTOR-STRUCTURE INTERACTION WITH PITCH-YAW FREEPLAY**  
*DHEERAJ TRIPATHI<sup>1</sup>, XINTIAN CHI<sup>1</sup>, MARCELA PELLEGRINI<sup>2</sup>, AMANDA PERRONI<sup>2</sup>, MICHELLE WESTIN<sup>2</sup>, BRENO CASTRO<sup>2</sup>, BRANO TITURUS<sup>1</sup>, DJAMEL REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB; <sup>2</sup>EMBRAER – TECHNOLOGY DEVELOPMENT DEPARTMENT, BR*
- 12:00 12:30 0089 **EXPERIMENTAL INVESTIGATION OF NONLINEAR WHIRL-FLUTTER IN A 2-DOF ROTOR-PYLON SYSTEM**  
*Y. QIU<sup>1</sup>, A. PETKOV<sup>1</sup>, D.A.W. BARTON<sup>1</sup>, D. REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*
- 12:30 13:00 0292 **COMPARATIVE AEROELASTIC ANALYSIS OF DISTRIBUTED ELECTRIC PROPULSION WINGS**  
*Y. E. DOGRU<sup>1</sup>, A. EKEN<sup>1</sup>, S. EKEN, ISTANBUL TECHNICAL UNIVERSITY, TR; <sup>1</sup>GEBZE TECHNICAL UNIVERSITY, TR*

**6.11**WE, 17.6.  
14:15 - 16:15**REDUCED ORDER MODELLING 1**  
CHAIR: B. STANFORD, NASA**ASSEMBLY HALL -  
AUDITORIUM**

- 14:15 14:45 0114 **DATA-DRIVEN PREDICTION OF AERODYNAMIC LOADS ON FLEXIBLE WINGS COMBINING NEURAL-NETWORKS AND LOW-DIMENSIONAL PROJECTIONS**  
*N. FABBIANE<sup>1</sup>, P.-E. DES BOSCS<sup>1</sup>; <sup>1</sup>DAAA, ONERA, FR*
- 14:45 15:15 0297 **A RESIDUAL LEARNING FRAMEWORK FOR IMPROVED AERODYNAMIC LOAD PREDICTION**  
*DIVYA SANGHI<sup>1</sup>, CARLOS CESNIK<sup>1</sup>; <sup>1</sup>UNIVERSITY OF MICHIGAN, US*
- 15:15 15:45 0116 **NEURAL ORDINARY DIFFERENTIAL EQUATIONS FOR TRANSONIC BUFFET REDUCED-ORDER MODELING IN AEROELASTICITY**  
*M. J. CANDON<sup>1</sup>, T. Y. XU<sup>1</sup>, E. H., DOWELL<sup>1</sup>, P. MARZOCCA, RMIT UNIVERISTY, US; <sup>1</sup>DUKE UNIVERSITY, US*  
**PRESENTED BY: T. Y. XU, DUKE UNIVERSITY**
- 15:45 16:15 0251 **AEROELASTIC DATA-ASSIMILATION OF WING TUNNEL EXPERIMENTS USING AERODYNAMICS REDUCED ORDER MODELS**  
*P.-E. DES BOSCS<sup>1</sup>, N. FABBIANE<sup>1</sup>, F. NICOLAS<sup>1</sup>, O. MARQUET<sup>1</sup>; <sup>1</sup>ONERA, FR*

**6.12**WE, 17.6.  
14:15 - 16:15**STEADY/UNSTEADY AERODYNAMICS 2**  
CHAIR: S. RUEGAMER, BOING**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

- 14:15 14:45 0024 **BUFFET ONSET PREDICTION WITH THE LINEARIZED FREQUENCY-DOMAIN METHOD**  
*D. QUERO<sup>1</sup>, C. KAISER<sup>1</sup>, S. TIMME, UNIVERSITY OF LIVERPOOL, GB; K. JACOBSON<sup>2</sup>, B. STANFORD<sup>2</sup>; <sup>1</sup>DLR, DE; <sup>2</sup>NASA LANGLEY RESEARCH CENTER, US*
- 14:45 15:15 0046 **ASSESSMENT OF MACHINE LEARNING METHODS FOR THE PREDICTION OF AIRCRAFT BUFFET LOADS**  
*G. GRASSO<sup>1</sup>, C. AQUILINI<sup>1</sup>, P. ZEMINIAN, TECHNICAL UNIVERSITY MUNICH, DE; <sup>1</sup>AIRBUS DEFENCE & SPACE GMBH, DE*
- 15:15 15:45 0299 **EFFICIENT NONLINEAR GUST LOAD PREDICTION VIA 3D HIGH-FIDELITY DATABASE-DRIVEN DYNAMIC CORRECTION**  
*E. GRAU LOZANO<sup>1</sup>, Y. NIVET<sup>1</sup>, N. GOURDAIN, ISAE-SUPAERO, UNIVERSITÉ DE TOULOUSE, FR; <sup>1</sup>AIRBUS OPERATIONS SAS, FR*
- 15:45 16:15 0063 **VALIDATION OF AEROELASTIC ASPECTS OF NEW CFD SOLVER CODA WITH AEROSTABIL WINDTUNNEL EXPERIMENT**  
*J. NOËL<sup>1</sup>, C. KAISER, INSTITUTE OF AEROELASTICITY, GERMAN AEROSPACE CENTER (DLR), DE; K. CHANDRASEKAR JEYANTHI, INSTITUTE OF AERODYNAMICS, GERMAN AEROSPACE CENTER (DLR), DE; B. STICKAN<sup>1</sup>; <sup>1</sup>AIRBUS OPERATIONS, DE*

**6.13**  
WE, 17.6.  
14:15 - 16:15

**COMPUTATIONAL AEROELASTICITY 5**  
CHAIR: A. KARLSSON, SAAB

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 14:15 14:45 0025 **CFD-BASED FLUTTER ANALYSES OF THE AWI HIGH-ASPECT-RATIO WING CONFIGURATION**  
*R. THORMANN<sup>1</sup>, E. COETZEE<sup>1</sup>, B. STICKAN<sup>1</sup>; <sup>1</sup>AIRBUS, DE*
- 14:45 15:15 0186 **NUMERICAL VALIDATION OF ACTUATOR LINE METHOD FOR SUBCRITICAL FLUTTER PREDICTION**  
*A. A. GARCÍA QUESADA<sup>1</sup>, F. SILVESTRE<sup>1</sup>, V. G. KLEINE<sup>2</sup>, A. V. G. CAVALIERI<sup>2</sup>; <sup>1</sup>TECHNISCHE UNIVERSITÄT BERLIN, DE; <sup>2</sup>INSTITUTO TECNOLÓGICO DE AERONÁUTICA, BR*
- 15:15 15:45 0209 **GEOMETRICALLY NONLINEAR AEROELASTIC CHARACTERISTICS OF WINGLETS FOR PASSIVE MORPHING WING APPLICATIONS**  
*M. KOUCHLEF<sup>1</sup>, N. TSUSHIMA<sup>1</sup>, T. YOKOZEKI<sup>1</sup>; <sup>1</sup>THE UNIVERSITY OF TOKYO, JP*
- 15:45 16:15 0029 **AEROELASTIC STABILITY ANALYSIS OF WING-MULTI-PROPELLER SYSTEMS UNDER AERODYNAMIC INTERACTIONS USING THE UVLM**  
*J. P. T. P. DOS SANTOS<sup>1</sup>, F. D. MARQUES<sup>1</sup>, C. RISO, GEORGIA INSTITUTE OF TECHNOLOGY, US; <sup>1</sup>UNIVERSITY OF SÃO PAULO, BR; **PRESENTED BY:** C. R. RISO, GEORGIA INSTITUTE OF TECHNOLOGY*

**6.14**  
WE, 17.6.  
14:15 - 16:15

**GROUND VIBRATION TESTING OF FLIGHT VEHICLES**  
CHAIR: C. AQUILINI, AIRBUS

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 14:15 14:45 0185 **EXPLORING NEW TECHNICAL ENVIRONMENT FOR GROUND VIBRATION TEST FOR THE EXTRA PERFORMANCE WING AIRBUS UPNEXT PROJECT**  
*THOMAS WILSON, AIRBUS UPNEXT UK, GB; NICOLAS LASTERE, AIRBUS SAS, FR; FABIEN AYME<sup>1</sup>, GUILLAUME OSMOND<sup>1</sup>, NICOLAS GUERIN<sup>2</sup>, ADRIEN RENOULT<sup>2</sup>, ZEIN SHAMI<sup>2</sup>, CYRILLE STEPHAN<sup>2</sup>, JULIAN SINSKE<sup>3</sup>, KEITH SOAL<sup>3</sup>, MARTIN TANG<sup>3</sup>, CARSTEN THIEM<sup>3</sup>; <sup>1</sup>AIRBUS OPERATIONS SAS, FR; <sup>2</sup>ONERA, FR; <sup>3</sup>DLR, DE*
- 14:45 15:15 0080 **AUTOMATIC PHASE RESONANCE TESTING OF AIRBUS EXTRA PERFORMANCE WING AIRCRAFT FOR FLUTTER COMPUTATION UPDATING**  
*A. CHUKWU<sup>1</sup>, M. TANG, DLR, DE; C. STEPHAN<sup>1</sup>; <sup>1</sup>ONERA, FR*
- 15:15 15:45 0246 **EXPERIMENTAL AND OPERATIONAL MODAL ANALYSIS OF FULL-SCALE AIRCRAFT GVT: TOWARDS A HYBRID METHODOLOGY**  
*T. CASILLAS GIL<sup>1</sup>, E. DÍAZ ARENAS<sup>1</sup>, L. TORRALBA CALLADO<sup>1</sup>, S. ORENES BALACIART<sup>1</sup>; <sup>1</sup>AIRBUS DEFENCE AND SPACE*
- 15:45 16:15 0165 **DESIGN AND TESTING OF A WING-FUEL TANK SYSTEM FOR FUEL SLOSH STUDIES**  
*A ELLMO, SAAB AB, SE*

**6.15**  
WE, 17.6.  
14:15 - 16:15

**ROTORCRAFT AEROELASTICITY 2**  
CHAIR: H. CLIMENT, (RETIRED, FORMERLY AIRBUS)

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 14:15 14:45 0226 **THE EFFECT OF VORTEX RING STATE ON AEROELASTICITY OF ROTOR BLADES**  
*M.A. AMOOZGAR, UNIVERSITY OF NOTTINGHAM, GB*
- 14:45 15:15 0253 **INFLUENCE OF GEOMETRIC NONLINEARITIES ON INVERSE LOAD IDENTIFICATION FOR HELICOPTER ROTOR BLADES**  
*L. KETTENHOFEN<sup>1</sup>, T. EBERHARDT<sup>1</sup>, A. DAFNIS<sup>1</sup>, C. BRAUN, FH AACHEN, DE; K.-U. SCHRÖDER<sup>1</sup>; <sup>1</sup>RWTH AACHEN UNIVERSITY, DE*
- 15:15 15:45 0194 **EXPERIMENTAL INVESTIGATION AND AEROELASTIC CHARACTERISATION OF A MULTIROTOR SYSTEM**  
*TANUJ SHARMA<sup>1</sup>, BRANISLAV TITURUS<sup>1</sup>, DJAMEL REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*

**7.11**  
WE, 17.6.  
16:45 - 18:45

**REDUCED ORDER MODELLING 2**  
CHAIR: C. CESNIK, UNIVERSITY OF MICHIGAN

ASSEMBLY HALL -  
AUDITORIUM

- 16:45 17:15 0264 **PARAMETRIC VOLTERRA SERIES FOR FLUTTER ANALYSIS**  
*M. RIGHI, ZHAW, CH; PRESENTED BY: M. RIGHI, ZHAW*
- 17:15 17:45 0156 **DEVELOPMENT OF STRUCTURAL REDUCED ORDER MODEL FOR MODAL BASE AEROELASTIC SOLVERS VIA GLOBAL OPTIMIZATION**  
*O. KÖSE, HSB SOLUTIONS GMBH, DE; A. KAYRAN, MIDDLE EAST TECHNICAL UNIVERSITY, TR*
- 17:45 18:15 0240 **ON THE FLUTTER MECHANISM DRIVEN BY SECOND BENDING-FIRST TORSION COUPLING IN HIGH-ASPECT RATIO WINGS**  
*M. PIRNAY<sup>1</sup>, E. VERSTRAELEN<sup>1</sup>, S. DOSSE<sup>2</sup>, X. AMANDOLESE<sup>2</sup>, T. ANDRIANNE<sup>1</sup>; <sup>1</sup>UNIVERSITY OF LIÈGE, BE; <sup>2</sup>CNAM, FR*
- 18:15 18:45 0021 **BENCHMARK SUPERCRITICAL WING COMPUTATIONS USING CREATE-AV KESTREL AND NASA AEROM**  
*W.A. SILVA, NASA, US*

**7.12**  
WE, 17.6.  
16:45 - 18:45

**STEADY/UNSTEADY AERODYNAMICS 3**  
CHAIR: J. DESLICH, US AIRFORCE

**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

- 16:45 17:15 0061 **ASSESSMENT OF LINEARISED FREQUENCY DOMAIN CAPABILITY WITH OVERSET MESHING**  
*D. NASH<sup>1</sup>, S. M. EDWARDS<sup>1</sup>, S. TIMME<sup>1</sup>, J. PATTINSON<sup>2</sup>, U S VEVEK<sup>2</sup>; <sup>1</sup>UNIVERSITY OF LIVERPOOL, GB; <sup>2</sup>AIRBUS OPERATIONS LTD, GB*
- 17:15 17:45 0130 **INITIALISATION STRATEGIES FOR AERODYNAMIC INSTABILITIES USING TIME SPECTRAL METHOD IN A NEW GENERATION FLOW SOLVER**  
*V. MOHAN<sup>1</sup>, R. HAUPT<sup>2</sup>, U S VEVEK<sup>3</sup>, C. KAISER<sup>2</sup>, J. PATTINSON<sup>3</sup>, A. STÜCK<sup>2</sup>, S. TIMME<sup>1</sup>; <sup>1</sup>UNIVERSITY OF LIVERPOOL, GB; <sup>2</sup>GERMAN AEROSPACE CENTER (DLR), DE; <sup>3</sup>AIRBUS OPERATIONS UK LTD., GB*
- 17:45 18:15 0057 **LINEARISED FREQUENCY DOMAIN SIMULATIONS OF FOLDING WINGTIPS WITH OVERSET MESHING**  
*S.M. EDWARDS<sup>1</sup>, C. WALES<sup>2</sup>, D. NASH<sup>1</sup>, A. MONI<sup>2</sup>, U S VEVEK<sup>3</sup>, J. PATTINSON<sup>3</sup>, S. TIMME<sup>1</sup>, D. JONES<sup>2</sup>; <sup>1</sup>UNIVERSITY OF LIVERPOOL, GB; <sup>2</sup>UNIVERSITY OF BRISTOL, GB; <sup>3</sup>AIRBUS OPERATIONS UK LTD., GB*
- 18:15 18:45 0320 **ASSESSMENT OF UNSTEADY CFD FOR FLUTTER ANALYSIS OF TWIN-ENGINE COMMERCIAL AIRPLANES**  
*A. SCALABRIN<sup>1</sup>, D. KUMAR, BOEING ENGINEERING & TECHNOLOGY INNOVATION, US; S. RUEGAMER<sup>1</sup>, E. RODRIGUES<sup>1</sup>; <sup>1</sup>BOEING COMMERCIAL AIRPLANES, US*

**7.13**  
WE, 17.6.  
16:45 - 18:45

**COMPUTATIONAL AEROELASTICITY 6**  
CHAIR: A. KARLSSON, SAAB

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 16:45 17:15 0039 **LOW FIDELITY MODEL FOR HYPERSONIC AEROELASTICITY WITH SHOCK IMPINGEMENT AND THERMO-MECHANICAL BUCKLING**  
*D.D. DOONER<sup>1</sup>, D.O. KIRKPATRICK<sup>1</sup>; <sup>1</sup>UNIVERSITY OF NEW SOUTH WALES, AU*
- 17:15 17:45 0052 **AEROTHERMOELASTIC RESPONSE ANALYSIS OF HYPERSONIC VEHICLES BASED ON A CFD-MODIFIED ENGINEERING METHOD**  
*L. MA<sup>1</sup>, Z.-Q. WAN<sup>1</sup>, X.-Z. WANG<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 17:45 18:15 0095 **AERO-THERMAL-ACOUSTIC-ELASTIC ANALYSIS OF A PLATE WITH ONE-WAY COUPLED TRANSIENT HEAT TRANSFER**  
*N. TOUATI KREIMER<sup>1</sup>, A. ROMM<sup>1</sup>, M. FREYDIN<sup>1</sup>; <sup>1</sup>TECHNION ISRAEL INSTITUTE OF TECHNOLOGY, IL*
- 18:15 18:45 0067 **FLUID-THERMAL-STRUCTURAL INTERACTION ANALYSIS OF COMPLIANT PANELS UNDER HYPERSONIC FLOW WITH EXPERIMENTAL CORRELATION**  
*MYRELLA V. CABRAL<sup>1</sup>, EMILIO BAGLIETTO<sup>1</sup>, WESLEY L. HARRIS<sup>1</sup>, EARL H. DOWELL, DUKE UNIVERSITY, US; <sup>1</sup>MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US*

**7.14**  
WE, 17.6.  
16:45 - 18:45

**AEROSERVOELASTICITY 4**  
CHAIR: T. KIER, DLR

ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)

- 16:45 17:15 0190 **ACTUATOR-INDUCED NONLINEAR DYNAMICS IN GUST LOAD ALLEVIATION AND ACTIVE FLUTTER SUPPRESSION**  
*L. MARINO<sup>1</sup>, X. WANG<sup>1</sup>, J. SODJA<sup>1</sup>; <sup>1</sup>TU DELFT, NL*
- 17:15 17:45 0293 **SLENDER BODY WITH TIME-VARYING MASS ELASTIC RESPONSE ESTIMATION USING A KALMAN STATE ESTIMATOR APPROACH**  
*I. GENKIN<sup>1</sup>, D.E. RAVEH<sup>1</sup>; <sup>1</sup>TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY, IL*
- 17:45 18:15 0133 **ANALYSIS OF LIMIT CYCLE OSCILLATIONS IN NONLINEAR FIN-ACTUATOR SYSTEMS BY NUMERICAL CONTINUATION**  
*Z. LIU<sup>1</sup>, Z. WU<sup>1</sup>, C. YANG<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 18:15 18:45 0234 **FAST ON-WING LED TRACKING ALGORITHM FOR PRACTICAL ON-LINE WING SHAPE ESTIMATION**  
*L. ZOLLI<sup>1</sup>, M. MICHALÓW<sup>1</sup>, L. R. LUSTOSA, FÉDÉRATION ENAC ISAE-SUPAERO ONERA, UNIVERSITÉ DE TOULOUSE, FR; <sup>1</sup>ISAE-SUPAERO, FR*

**7.15**  
WE, 17.6.  
16:45 - 18:45

**GENERAL TOPICS IN AEROELASTICITY**  
CHAIR: J. SINSKE, DLR

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 16:45 17:15 0069 **AEROELASTIC MODELLING AND ANALYSIS OF CURVED COMPOSITE PROPELLER BLADES**  
*P.M. VAN VEEN<sup>1</sup>, T. SINNIGE<sup>1</sup>, J. SODJA<sup>1</sup>; <sup>1</sup>DELFT UNIVERSITY OF TECHNOLOGY, NL*
- 17:15 17:45 0093 **THREE-DIMENSIONAL LARGE DEFORMATION RECONSTRUCTION OF WIND TURBINE BLADES BASED ON STRAIN MEASUREMENT**  
*C.-C. XIE<sup>1</sup>, M.-Z. ZHENG<sup>1</sup>, Y. MENG<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 17:45 18:15 0219 **A COMPUTATIONALLY EFFICIENT AEROELASTIC MODEL OF WIND TURBINE BLADES INTEGRATED WITH A LATTICE BOLTZMANN METHOD SOLVER**  
*J.G.S.R DE SÁ<sup>1</sup>, V.G. KLEINE<sup>1</sup>, F.L. CARDOSO-RIBEIRO<sup>1</sup>, H. KORB<sup>2</sup>, M. MOHAMMADI<sup>2</sup>, S. IVANELL<sup>2</sup>; <sup>1</sup>INSTITUTO TECNOLÓGICO DE AERONÁUTICA, BR; <sup>2</sup>UPPSALA UNIVERSITY, SE*
- 18:15 18:45 0140 **DYNAMIC CHARACTERISTICS OF AN EXTERNAL AIRCRAFT PANEL WITH A TAILORED DAMPING TREATMENT**  
*SANUJA JAYATILAKE<sup>1</sup>, JONATHAN COOPER<sup>1</sup>, BRANISLAV TITURUS<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*

**THURSDAY, 18 JUNE 2026**

**0.3**  
TH, 18.6.  
08:30 - 09:15

**PLENARY 3**  
CHAIR: L. TICHY, GERMAN AEROSPACE CENTER, DE

- 08:30 09:15 **80 YEARS OF AIRCRAFT GVT BY ONERA;**  
PASCAL LUBRINA, ONERA

Status: 29 May 2026 - Subject to time & title changes - Presentation is based on information provided by the authors.

**8.11**  
TH, 18.6.  
09:30 - 11:00

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 6: FOLDING WINGTIPS**  
CHAIR: B. BRENO, EMBREAR

**ASSEMBLY HALL - AUDITORIUM**

- 09:30 10:00 0178 **EXTENDED STABILITY AND STABILITY BOUNDARY REDUCTION ANALYSIS OF FLEXIBLE AIRCRAFT WITH FOLDING WINGTIPS**  
*L. DEHMLOW<sup>1</sup>, F. J. SILVESTRE<sup>1</sup>; <sup>1</sup>TU BERLIN, DE*
- 10:00 10:30 0160 **AEROELASTIC ANALYSIS OF RAKED FOLDING WINGTIPS ON SWEEPED WINGS**  
*F SACCHI<sup>1</sup>, F. J HEALY<sup>1</sup>, D REZGUI<sup>1</sup>, J. E COOPER<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*
- 10:30 11:00 0252 **A COMPUTATIONAL FRAMEWORK FOR ANALYZING FOLDING WING TIP DYNAMICS ON HIGHLY FLEXIBLE WINGS: A FLEXIBLE MULTIBODY FORMULA**  
*L.B. DA LUZ<sup>1</sup>, F.L. CARDOSO-RIBEIRO<sup>1</sup>; <sup>1</sup>INSTITUTO TECNOLÓGICO DE AERONÁUTICA, BR*

**8.12**  
TH, 18.6.  
09:30 - 11:00

**DYNAMIC LOADS 1: BUFFET LOADS**  
CHAIR: J. COOPER, UNIVERSITY OF BRISTOL

**ALTE MENSA - V.TROTT HALL (1ST FLOOR)**

- 09:30 10:00 0134 **AERO-STRUCTURAL MODELING AND PREDICTION OF TRANSONIC SHOCK-BUFFET LOADS ON AN F-16 WING**  
*T. NAHOM JIDOVETSKI<sup>1</sup>, D. E. RAVEH<sup>1</sup>, M. IOVNOVICH, ISRAEL AIR FORCE, IL; <sup>1</sup>TECHNION – ISRAEL INSTITUTE OF TECHNOLOGY, IL*
- 10:00 10:30 0071 **COMPARATIVE STUDY OF BUFFET RESPONSE IN SINGLE-FIN AND TWIN-FIN COMBAT AIRCRAFT**  
*UPV SUDHA<sup>1</sup>, CM JAGATH<sup>1</sup>, RV VAIDYANATHAN<sup>1</sup>; <sup>1</sup>AERONAUTICAL DEVELOPMENT AGENCY, IN PRESENTED BY: SUDHA UPV, AERONAUTICAL DEVELOPMENT AGENCY*
- 10:30 11:00 0261 **BUFFET LOADS RECOVERY FROM PSD LEAST SQUARE REGRESSION OF INFLIGHT ACCELERATIONS AND AIRFRAME DIGITAL TWIN**  
*A. ALBONICO<sup>1</sup>, D. MONTI<sup>1</sup>, L. ANDRINI<sup>1</sup>; <sup>1</sup>LEONARDO AERONAUTICS DIVISION, IT*

**8.13**  
TH, 18.6.  
09:30 - 11:00

**COMPUTATIONAL AEROELASTICITY 7**  
CHAIR: A. MCHUGH, US AIRFORCE

**ALTE MENSA - H.VOGT HALL (GROUND FLOOR)**

- 09:30 10:00 0081 **QUANTIFICATION OF NON-LINEAR AERODYNAMIC EFFECTS ON THE LIMITING GUST LOAD CASES**  
*K.M. STREITENBERGER<sup>1</sup>, J.M. FELDWISCH<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER; INSTITUTE OF AEROELASTICITY, DE*
- 10:00 10:30 0050 **DLM- AND CFD-BASED CONTINUOUS TURBULENCE ENCOUNTER FOR A HIGH ASPECT RATIO CONFIGURATION**  
*D. FRIEDEWALD<sup>1</sup>, V. HANDOJO<sup>1</sup>, C. KAISER<sup>1</sup>, S. CUMNUANTIP<sup>1</sup>; <sup>1</sup>DLR, DE*
- 10:30 11:00 0249 **HIGH-FIDELITY AEROELASTIC ANALYSIS OF PASSIVE FOLDING-WING CONCEPTS FOR GUST LOAD ALLEVIATION: COUPLED CFD/CSD STUDY**  
*E.M. GÜVENTÜRK<sup>1</sup>, M. AHMADI<sup>1</sup>, T. FARSAZI<sup>1</sup>, H.C. ÖNEL<sup>1</sup>, A. KAYRAN, MIDDLE EAST TECHNICAL UNIVERSITY, TR; H.H. KHODAPARAST, SWANSEA UNIVERSITY, GB; <sup>1</sup>ADANA SCIENCE AND TECHNOLOGY UNIVERSITY, TR; PRESENTED BY: H. H. K HADDAD KHODAPARAST, SWANSEA UNIVERSITY*

**8.14**  
TH, 18.6.  
09:30 - 11:00

**AEROSERVOELASTICITY 5**  
CHAIR: R. DE BREUKER, TU DELFT

ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)

- 09:30 10:00 0112 **AEROSERVOELASTIC MODEL IN TIME DOMAIN AND A NOVEL APPROACH TO COUPLE THE FLIGHT MECHANICS-AEROSERVOELASTICITY**  
*LUCA DI SIVO<sup>1</sup>, EDOARDO ORAZI<sup>1</sup>, STEFANO RAIMONDO<sup>1</sup>, NATALE CALVI<sup>1</sup>; <sup>1</sup>LEONARDO SPA, IT*  
**PRESENTED BY:** DI SIVO, LEONARDO AERONAUTICS – AIRCRAFT BU
- 10:00 10:30 0300 **A CONTROL-ORIENTED AEROELASTIC MODELLING FRAMEWORK FOR COMPLIANT WINGS WITH TRAILING-EDGE MORPHING**  
*A. BALON<sup>1</sup>, F. SVOBODA<sup>1</sup>, M. HROM?ÍK<sup>1</sup>, N. STARIKOV<sup>2</sup>, A. SCHIRRER<sup>2</sup>; <sup>1</sup>CZECH TECHNICAL UNIVERSITY IN PRAGUE, CZ; <sup>2</sup>TU WIEN, AT*
- 10:30 11:00 0279 **UPDATED AEROSERVOELASTIC MODEL OF AN ACTIVE FLUTTER SUPPRESSION DEMONSTRATOR AIRCRAFT**  
*T. M- KIER, DLR, DE*

**8.15**  
TH, 18.6.  
09:30 - 11:00

**ROTORCRAFT AEROELASTICITY 3**  
CHAIR: H. CLIMENT, (RETIRED, FORMERLY AIRBUS)

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 09:30 10:00 0142 **AN INTEGRATED FRAMEWORK FOR AEROELASTIC RESPONSE ANALYSIS OF PROPELLER-WING SYSTEMS**  
*RUIJIE NIU<sup>1</sup>, CHANGCHUAN XIE<sup>1</sup>, ZHITAO ZHANG, CN; CHAO AN<sup>1</sup>, YANG MENG<sup>1</sup>; <sup>1</sup>BEIHANG UNIVERSITY, CN; **PRESENTED BY:** NIU, BEIHANG UNIVERSITY*
- 10:00 10:30 0187 **TOWARDS ROBUST WHIRL FLUTTER PREDICTION IN PROPELLER AIRCRAFT: A CRITICAL REVIEW OF MODELING PARAMETERS**  
*C. KOCH<sup>1</sup>, C. KAISER<sup>1</sup>, H. HENNINGS<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), DE*
- 10:30 11:00 0179 **EFFECT OF SWIRL RECOVERY VANES ON PROPELLER WHIRL FLUTTER**  
*V.J MARLETTA<sup>1</sup>, C. KOCH<sup>1</sup>; <sup>1</sup>GERMAN AEROSPACE CENTER (DLR), DE*

**9.11**  
TH, 18.6.  
11:30 - 13:00

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 7: DISTRIBUTED PROPULSION**  
CHAIR: E. GARRIGUES, DASSAULT

ASSEMBLY HALL -  
AUDITORIUM

- 11:30 12:00 0256 **NUMERICAL VALIDATION OF A HIGH-ASPECT RATIO WING FLEXIBLE AIRCRAFT MODELLED IN AN ENHANCED LOW-FIDELITY FRAMEWORK**  
*W. MICKELIN<sup>1</sup>, R.A. SENGER FRANCO<sup>1</sup>, A.A.G. QUESADA<sup>1</sup>, P.J. GONZALEZ<sup>1</sup>, F.J. SILVESTRE<sup>1</sup>, K. STREITENBERGER<sup>2</sup>, W.R. KRÜGER<sup>2</sup>; <sup>1</sup>TECHNICAL UNIVERSITY OF BERLIN, DE; <sup>2</sup>GERMAN AEROSPACE CENTER, DE*
- 12:00 12:30 0296 **AEROELASTIC OPTIMIZATION OF FLEXIBLE AIRCRAFT WINGS WITH DISTRIBUTED ELECTRIC PROPELLERS**  
*SAMET TALHA DEDE<sup>1</sup>, JONATHAN COOPER<sup>1</sup>, DJAMEL REZGUI<sup>1</sup>; <sup>1</sup>UNIVERSITY OF BRISTOL, GB*
- 12:30 13:00 0034 **AEROELASTIC SHAPE OPTIMIZATION OF A HYBRID REGIONAL AIRCRAFT WITH DISTRIBUTED PROPULSION**  
*R. MAIERL, AIRBUS DEFENCE AND SPACE, DE*

**9.12**  
TH, 18.6.  
11:30 - 13:00

**DYNAMIC LOADS 2: GUST LOADS**  
CHAIR: M. OLIVER, AIRBUS

**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

- 11:30 12:00 0121 **DIFFERENTIABLE GUST AND MANEUVER LOADS AT SCALE ON VERY FLEXIBLE AIRCRAFT**  
*RAFAEL PALACIOS<sup>1</sup>, ALVARO CEA<sup>1</sup>; <sup>1</sup>IMPERIAL COLLEGE LONDON, GB*
- 12:00 12:30 0229 **HEAVY TURBOPROP AIRCRAFT IN FIREFIGHTER CONFIGURATION. GUST LOADS ALLEVIATION FUNCTION EFFECTIVENESS AND 1P LOADS MODEL**  
*M. REYES<sup>1</sup>, G. PASTOR<sup>1</sup>, M. OLIVER<sup>1</sup>, F. ARÉVALO<sup>1</sup>, R. NAVARRO, AIRBUS OPERATIONS, ES; <sup>1</sup>AIRBUS DEFENCE AND SPACE, ES*
- 12:30 13:00 0011 **STATISTICAL DISCRETE GUST METHOD FOR ATMOSPHERIC TURBULENCELOADS IN AEROELASTIC RESPONSE MODELS**  
*V.H.A. MOREIRA<sup>1</sup>, R.G.A SILVA<sup>1</sup>, D.A. CUNHA, EMBRAER, BR; <sup>1</sup>ITA - TECHNOLOGICAL INSTITUTE OF AERONAUTICS, BR*  
**PRESENTED BY:** V.H.A. MOREIRA, ITA - TECHNOLOGICAL INSTITUTE OF AERONAUTICS

**9.13**  
TH, 18.6.  
11:30 - 13:00

**COMPUTATIONAL AEROELASTICITY 8**  
CHAIR: R. KOLONAY, US AIRFORCE

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 11:30 12:00 0124 **AEROELASTIC STABILITY CALCULATIONS OF A LAMINAR WING USING VISCOUS-INVISCID INTERACTION**  
*A. CROVATO<sup>1</sup>, C. LIAUZUN<sup>1</sup>, P. DECHAMPS<sup>2</sup>, G. DIMITRIADIS<sup>2</sup>, V.E. TERRAPON<sup>2</sup>; <sup>1</sup>ONERA, FR; <sup>2</sup>UNIVERSITÉ DE LIÈGE, BE*
- 12:00 12:30 0286 **HIGH-FIDELITY AERODYNAMIC MODELS FOR PROPELLER-WING WHIRL FLUTTER**  
*F. IORIO<sup>1</sup>, J.-S. SCHOTTÉ<sup>2</sup>, A. PLACZEK<sup>2</sup>, A. RIOLS-FONCLARE<sup>2</sup>, V. PAGÈS<sup>1</sup>, J.-C. CHASSAING, CNRS, INSTITUT JEAN LE ROND D'ALEMBERT, UMR 7190, FR; <sup>1</sup>SAFRAN AIRCRAFT ENGINES, FR; <sup>2</sup>DAAA, ONERA, FR*
- 12:30 13:00 0189 **FLUTTER ANALYSIS OF A HOSE-DROGUE SYSTEM WITH AERODYNAMIC GRID FINS FOR AERIAL REFUELING**  
*K. SALEHI PANIAGUA<sup>1</sup>, P. GARCÍA-FOGEDA<sup>1</sup>, F. ARÉVALO LOZANO<sup>1</sup>; <sup>1</sup>UNIVERSIDAD POLITÉCNICA DE MADRID, ES*

**9.14**  
TH, 18.6.  
11:30 - 13:00

**STEADY/UNSTEADY AERODYNAMICS 4**  
CHAIR: B. STANFORD, NASA

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 11:30 12:00 0026 **CONTROL SURFACE MODELING: ANALYSIS OF UNSTEADY EFFECTS OF SPANWISE GAPS USING LINEARIZED FREQUENCY-DOMAIN SOLVERS**  
*L.B. STREHER, DLR, DE; B. STICKAN<sup>1</sup>, N. YOUKILIS<sup>1</sup>, D. NASH, UNIVERSITY OF LIVERPOOL, GB; <sup>1</sup>AIRBUS OPERATIONS GMBH, DE*
- 12:00 12:30 0018 **SEMI-AKTIVE FLUTTER SUPPRESSION USING CONTROL SURFACE DEFLECTIONS**  
*K. BANTSCHIEFF<sup>1</sup>, S. MENGELKAMP<sup>1</sup>, C. BREITSAMTER<sup>1</sup>; <sup>1</sup>TECHNISCHE UNIVERSITÄT MÜNCHEN, DE*  
**PRESENTED BY:** S. MENGELKAMP, TECHNISCHE UNIVERSITÄT MÜNCHEN

**9.15**  
TH, 18.6.  
11:30 - 13:00

**HIGHLY FLEXIBLE AIRCRAFT STRUCTURES**  
CHAIR: M. FRUMUSA, LEONARDO

ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)

- 11:30 12:00 0274 **COMPARISON OF LOW-ORDER NONLINEAR AEROELASTIC MODELS FOR NUMERICAL CONTINUATION**  
*F HEALY, UNIVERSITY OF BRISTOL, GB*
- 12:00 12:30 0316 **NONLINEAR AEROELASTIC BEHAVIOUR OF FLEXIBLE HAPS WINGS AND ITS IMPACT ON LOAD DISTRIBUTION, TRIM AND CONTROL**  
*O.Y. HAVAZA, NATIONAL TECHNICAL UNIVERSITY OF UKRAINE "IGOR SIKORSKY KYIV POL, UA*
- 12:30 13:00 0182 **EXPLOITING CONTROL REVERSAL FOR SIMULTANEOUS ACTIVE AND PASSIVE MANOEUVRE LOAD ALLEVIATION**  
*E. FILIPPOU, DELFT UNIVERSITY OF TECHNOLOGY, NL*

**10.11**  
TH, 18.6.  
14:15 - 15:45

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 8: METHODS AND FRAMEWORKS**  
CHAIR: R. KOLONAY, US AIRFORCE

ASSEMBLY HALL -  
AUDITORIUM

- 14:15 14:45 0056 **INERTIAL RELIEF IN FLUID STRUCTURE INTERACTION PROBLEMS WITH ANALYTIC SENSITIVITIES**  
*D. CLEMENS, UNIVERSITY OF DAYTON RESEARCH INSTITUTE, US; D. J. NEIFERD<sup>1</sup>, H. SMITH<sup>1</sup>, N. NOVOTNY<sup>1</sup>; <sup>1</sup>AIR FORCE RESEARCH LABORATORY, US*
- 14:45 15:15 0070 **VALIDATION OF A NONLINEAR VORTEX-LATTICE METHOD FRAMEWORK FOR STATIC AEROELASTIC ANALYSES OF A FULL AIRCRAFT**  
*L. ADAMS<sup>1</sup>, M. PARENTEAU, BOMBARDIER AVIATION, CA; E. LAURENDEAU<sup>1</sup>; <sup>1</sup>POLYTECHNIQUE MONTRÉAL, CA*
- 15:15 15:45 0263 **PREDICTION OF GEOMETRIC NONLINEAR STEADY FLIGHT LOADS VIA EXTENDED MODAL ROTATION METHOD**  
*JONATHAN GRIGOLEIT-HILGER, DLR, DE*

**10.12**  
TH, 18.6.  
14:15 - 15:45

**DYNAMIC LOADS 3: SPECIAL LOADS**  
CHAIR: M. RITTER, DLR

ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)

- 14:15 14:45 0077 **INFLUENCE OF LANDING GEAR SHOCK ABSORBER DAMPING ON AIRFRAME LOADS AND ACCELERATIONS**  
*D. FLEISCHER<sup>1</sup>, M. MELIS<sup>1</sup>, C. VIDY<sup>1</sup>; <sup>1</sup>AIRBUS DEFENCE AND SPACE, DE*
- 14:45 15:15 0119 **DYNAMIC RESPONSE ANALYSIS OF PYLON RELEASE FOR FLEXIBLE AIRCRAFTS**  
*C. SONG<sup>1</sup>, C.C. XIE<sup>1</sup>, Y.L. SHAO<sup>1</sup>, M. LEI, CHINESE FLIGHT TEST ESTABLISHMENT, CN; <sup>1</sup>BEIHANG UNIVERSITY, CN*
- 15:15 15:45 0017 **STRUCTURAL LOADS MODELING AND ALLEVIATION TARGET DEFINITION OF A FLEXIBLE TRANSONIC AIRCRAFT USING STRIP-THEORY FLIGHT DYNAMICS**  
*L.-H. LEMKE<sup>1</sup>, F. THIELECKE<sup>1</sup>; <sup>1</sup>HAMBURG UNIVERSITY OF TECHNOLOGY, DE*

**10.13**  
TH, 18.6.  
14:15 - 15:45

**COMPUTATIONAL AEROELASTICITY 9**  
CHAIR: D. QUERO, DLR

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

- 14:15 14:45 0108 **DESIGN-ORIENTED STRESS-BASED HIGH FIDELITY AEROELASTIC GUST CONSTRAINTS**  
*B. STANFORD<sup>1</sup>, A. THELEN<sup>1</sup>, K. JACOBSON<sup>1</sup>; <sup>1</sup>NASA LARC, US*
- 14:45 15:15 0177 **GUST LOAD ALLEVIATION (GLA) CONTROLLER SYNTHESIS USING HIGH-FIDELITY TRANSONIC AERODYNAMICS**  
*D. MATAS RUIZ<sup>1</sup>, D. QUERO<sup>1</sup>, C. KAISER<sup>1</sup>; <sup>1</sup>DEUTSCHES ZENTRUM FÜR LUFT- UND RAUMFAHRT, DE*
- 15:15 15:45 0040 **AEROEL. DAMPING AUGMENTATION AND FLUTTER ANALYSIS FOR A HIGH-ASPECT-RATIO WING AIRCRAFT IN THE TRANSONIC FLIGHT REGIME**  
*M. FEHRS<sup>1</sup>, B. MICHELI<sup>1</sup>, C. KAISER<sup>1</sup>, D. QUERO<sup>1</sup>; <sup>1</sup>DLR, DE*

**10.14**  
TH, 18.6.  
14:15 - 15:45

**ACTIVE CONTROL AND ADAPTIVE STRUCTURES 3**  
CHAIR: T. KIER, DLR

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 14:15 14:45 0225 **MULTIDIMENSIONAL LOADS CRITERIA FOR ACTIVE LOAD ALLEVIATION CONTROL DESIGN**  
*C. WALLACE<sup>1</sup>, N. FEZANS<sup>1</sup>; <sup>1</sup>DLR (GERMAN AEROSPACE CENTER), DE*  
**PRESENTED BY:** C. WALLACE, DLR (GERMAN AEROSPACE CENTER)
- 14:45 15:15 0169 **DESIGN OF A DECENTRALIZED GUST LOAD ALLEVIATION CONTROL LAW WITH A PRIMARY FLIGHT CONTROLLER IN THE LOOP**  
*JOÃO MARTINS<sup>1</sup>, GERTJAN LOOYE<sup>1</sup>, THIEMO KIER<sup>1</sup>; <sup>1</sup>DLR - GERMAN AEROSPACE CENTER, DE*
- 15:15 15:45 0035 **THE EFFECT OF WINGBOX ELASTIC DEFORMATION ON THE MORPHING SHAPES OF THE TRANSLATION INDUCED CAMBER CONCEPT**  
*I. TSATSAS<sup>1</sup>, X. CARRILLO CÓRCOLES<sup>1</sup>, J. SODJA<sup>1</sup>, R. DE BREUKER<sup>1</sup>; <sup>1</sup>TU DELFT, NL*

**10.15**  
TH, 18.6.  
14:15 - 15:45

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 10: OPT. (3)**  
CHAIR: B. EUSSEN, NLR

**ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)**

- 14:15 14:45 0242 **AEROSTRUCTURAL ANALYSIS AND OPTIMIZATION USING VISCOUS-INVISCID INTERACTION**  
*P. DECHAMPS<sup>1</sup>, A. CROVATO, ONERA, FR; G. DIMITRIADIS<sup>1</sup>, V.E. TERRAPON<sup>1</sup>; <sup>1</sup>UNIVERSITY OF LIÈGE, BE*
- 14:45 15:15 0047 **A GENERALIZED CONDENSATION METHOD FOR FIELD-BASED STRUCTURES**  
*H. SMITH<sup>1</sup>, C. LUPP<sup>1</sup>; <sup>1</sup>AIR FORCE RESEARCH LABORATORY, US*
- 15:15 15:45 0048 **SKIN-BUCKLING INDUCED PASSIVE LOAD ALLEVIATION**  
*D. HAHN<sup>1</sup>, F. SIEBERT<sup>2</sup>, M. HAUPT<sup>1</sup>, A. BAUKNECHT<sup>2</sup>, S. HEIMBS<sup>1</sup>; <sup>1</sup>TU BRAUNSCHWEIG, IFL, DE; <sup>2</sup>TU BRAUNSCHWEIG, ISM, DE*

11.11  
TH, 18.6.  
16:15 - 17:45

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 9: OPT. (2)**  
CHAIR: A. VOSS, DLR

**ASSEMBLY HALL -  
AUDITORIUM**

16:15 16:45 0143 **AEROSTRUCTURAL OPTIMIZATION OF A BUSINESS JET WING**  
*L. JOUSSEAUME<sup>1</sup>, Y. REVALOR<sup>1</sup>, E. GARRIGUES<sup>1</sup>; <sup>1</sup>DASSAULT AVIATION, FR*

16:45 17:15 0262 **THE DLR-D2AE – A SHORT MEDIUM RANGE AIRCRAFT CONFIGURATION FOR AEROELASTIC INVESTIGATIONS**  
*T. KLIMMEK<sup>1</sup>, M. SCHULZE<sup>1</sup>; <sup>1</sup>DLR, INSTITUTE OF AEROELASTICITY, DE*

11.12  
TH, 18.6.  
16:15 - 17:45

**COMPUTATIONAL AEROELASTICITY 10**  
CHAIR: B. CASTRO, EMBREAR

**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

16:15 16:45 0096 **FRAMEWORK FOR EFFICIENT AND ROBUST PREDICTION OF FREEPLAY INDUCED LIMIT CYCLE OSCILLATIONS WITH CONSIDERATION OF PRELOAD**  
*V. MOTTA<sup>1</sup>, J. C. KNICKENBERG<sup>1</sup>, M. LEITNER<sup>1</sup>, C. VIDY<sup>1</sup>; <sup>1</sup>AIRBUS DEFENCE AND SPACE GMBH, DE*  
**PRESENTED BY:** J. K. KNICKENBERG, AIRBUS DEFENCE AND SPACE

16:45 17:15 0055 **AERODYNAMIC DAMPING DURING CLASSIC SURGE**  
*C. REIBER, DLR, DE*

17:15 17:45 0227 **DATA-DRIVEN AEROACOUSTOELASTIC ASSESSMENT OF LAUNCHER PAYLOADS**  
*R. GIANSAnte, UNIVERSITY OF TUSCIA, IT; E. DE PAOLA, ORIZZONTE SISTEMI NAVALI S.P.A, IT; G. BERNARDINI<sup>1</sup>, R. CAMUSSI<sup>1</sup>, M. LAPI<sup>2</sup>, L. PETRUCCI<sup>2</sup>; <sup>1</sup>ROMA TRE UNIVERSITY, IT; <sup>2</sup>THALES ALENIA SPACE ITALIA, IT*

11.13  
TH, 18.6.  
16:15 - 17:45

**COMPUTATIONAL AEROELASTICITY 11**  
CHAIR: D. QUERO, DLR

**ALTE MENSA -  
H.VOGT HALL  
(GROUND FLOOR)**

16:15 16:45 0218 **AERO-SERVO-ELASTIC ANALYSIS OF 2D AIRFOIL IN ALLEVIATING TRANSONIC FLOW-INDUCED VIBRATIONS THROUGH FLAP CONTROL**  
*H.-C. ÖNEL<sup>1</sup>, M. AHMADI<sup>1</sup>, T. FARSADI<sup>1</sup>, A. KAYRAN, MIDDLE EAST TECHNICAL UNIVERSITY, TR; H.-H. KHODAPARAST, SWANSEA UNIVERSITY, GB; <sup>1</sup>ADANA SCIENCE AND TECHNOLOGY UNIVERSITY, TR*  
**PRESENTED BY:** H.-H. KHODAPARAST, SWANSEA UNIVERSITY

16:45 17:15 0310 **ON THE MODELLING AND SIMULATION OF BODY-FREEDOM AEROELASTICITY OF MORPHING AIR-LAUNCHED UAVS**  
*S.J. VAN ELSLOO<sup>1</sup>, R. DE BREUKER<sup>1</sup>, M. VOSKUIJL, FACULTY OF MILITARY SCIENCES, NETHERLANDS DEFENCE ACADEMY, NL; <sup>1</sup>FACULTY OF AEROSPACE ENGINEERING, DELFT UNIVERSITY OF TECHNOLOGY, NL*

17:15 17:45 0306 **A METHOD FOR THE GEOMETRICALLY NONLINEAR COMPUTATION OF MANEUVER LOADS IN PRELIMINARY DESIGN OF JET TRANSPORTS**  
*M. R. RITTER<sup>1</sup>, K. STREITENBERGER<sup>1</sup>; <sup>1</sup>DLR INSTITUTE OF AEROELASTICITY, DE*

**11.14**  
TH, 18.6.  
16:15 - 17:45

**FLIGHT VIBRATION SURVEY AND FLIGHT FLUTTER TEST**  
CHAIR: M. BÖSWALD, DLR

**ALTE MENSA -  
E.NOETHER HALL  
(GROUND FLOOR)**

- 16:15 16:45 0231 **ASSESSMENT OF LIDAR-BASED TECHNIQUES TO MEASURE IN-FLIGHT DEFORMATION OF AEROSPACE STRUCTURES**  
*I. LÓPEZ HERREROS<sup>1</sup>, F. ARÉVALO LOZANO<sup>1</sup>, J. BARRERA RODRÍGUEZ<sup>1</sup>; <sup>1</sup>AIRBUS DEFENCE & SPACE, ES*
- 16:45 17:15 0228 **DORNIER SEASTAR CD2 - FLUTTER FLIGHT TEST - IMPULSE AND TURBULENCE BASED OMA USING FFT, NYQUIST, PSD AND SVD**  
*A. GRAF<sup>1</sup>, A. VOLLAN<sup>1</sup>; <sup>1</sup>AEROFEM GMBH, CH*

**11.15**  
TH, 18.6.  
16:15 - 17:45

**AEROELASTICITY IN CONCEPTUAL AIRCRAFT DESIGN 11: OPT. (4)**  
CHAIR: B. EUSSEN, NLR

**ALTE MENSA -  
ROOM TABERNA  
(GROUND FLOOR)**

- 16:15 16:45 0196 **CO-DESIGN OF AEROELASTIC SYSTEMS WITH DEEP REINFORCEMENT LEARNING**  
*Y.C. LI<sup>1</sup>, U. FASEL<sup>1</sup>; <sup>1</sup>IMPERIAL COLLEGE LONDON, GB*
- 16:45 17:15 0174 **GEOMETRIC PARAMETER-BASED SURROGATE MODELLING FOR AEROELASTIC ANALYSIS OF NOVEL AIRCRAFT CONFIGURATIONS**  
*Ö. ZAFER<sup>1</sup>, A. RAMPURAWALA<sup>1</sup>, O. KÖSE<sup>1</sup>; <sup>1</sup>HSB SOLUTIONS GMBH, DE*  
**PRESENTED BY: O.Z. ZAFER, HSB SOLUTIONS GMBH**
- 17:15 17:45 0237 **RAPTOR: A GRADIENT-BASED MULTIDISCIPLINARY DESIGN OPTIMIZATION FRAMEWORK FOR AIRCRAFT PRELIMINARY DESIGN**  
*J. VAN DEN BERGHE<sup>1</sup>, P. DECHAMPS<sup>1</sup>, A. CROVATO, ONERA, FR; V.E. TERRAPON<sup>1</sup>, T. ANDRIANNE<sup>1</sup>; <sup>1</sup>UNIVERSITY OF LIÈGE, BE*

TUE, 16.6.  
TH, 18.6.

**POSTERPRESENTATIONS**

**ALTE MENSA -  
V.TROTT HALL  
(1ST FLOOR)**

Will be shown  
at Website:



## Conference Venues

### ASSEMBLY HALL AT THE WILHELMSPLATZ

Wilhelmsplatz 1  
37073 Goettingen  
Germany



### How to reach the venues at the „Wilhelmsplatz“ in Goettingen:

#### By foot from Train Station:

You can reach the „Wilhelmsplatz“ with the Assembly Hall as well as the Conference Centre „Alte Mensa“ in a few minutes by foot. Use a route service like Google Maps and let it show you the way from „Goettingen Station“ to the „Wilhelmsplatz“.

#### Parking:

There are NO parking possibilities directly located at the „Wilhelmsplatz“. The nearest car park is at the „Albani Church/Town Hall“ on the so called „Albani Square“.

#### Local Bus service at Goettingen:

Next station close to „Wilhelmsplatz“ is the station „Jüdenstrasse“

#### Local Taxi/Cab service at Goettingen:

Taxi call by phone +49 (0) 551 69300

Online info on how to get to the venue and further links:



#### PLEASE NOTICE:

Each participant is responsible for their own daily travel to the event location. There is no shuttle service to the hotels.

### CONFERENCE AND EVENT CENTRE

### „ALTE MENSA“ AT THE WILHELMSPLATZ

Wilhelmsplatz 3  
37073 Goettingen  
Germany



### Reception and Networking-Evening

Participation in the Reception and Networking-Evening is optional and must be indicated during registration. As the number of participants is limited, registrations will be considered on a first-come, first-served basis.

### Disclaimer

The DGLR shall not be liable for accidents or damage to facilities at the event venues caused by participants, nor for damage to or loss of items or documents brought by participants. The DGLR also accepts no responsibility for costs arising from delays or changes in the programme schedule. Furthermore, the Terms and Conditions of the DGLR apply.

### Paper Download

Papers of the IFASD 2026 will be available online during the time of the forum for participants only. Participants can access the download section via the login information.

User:

ifasd2026\_paper

Password:

fg8z56ts

Login button can be found at the IFASD Website:



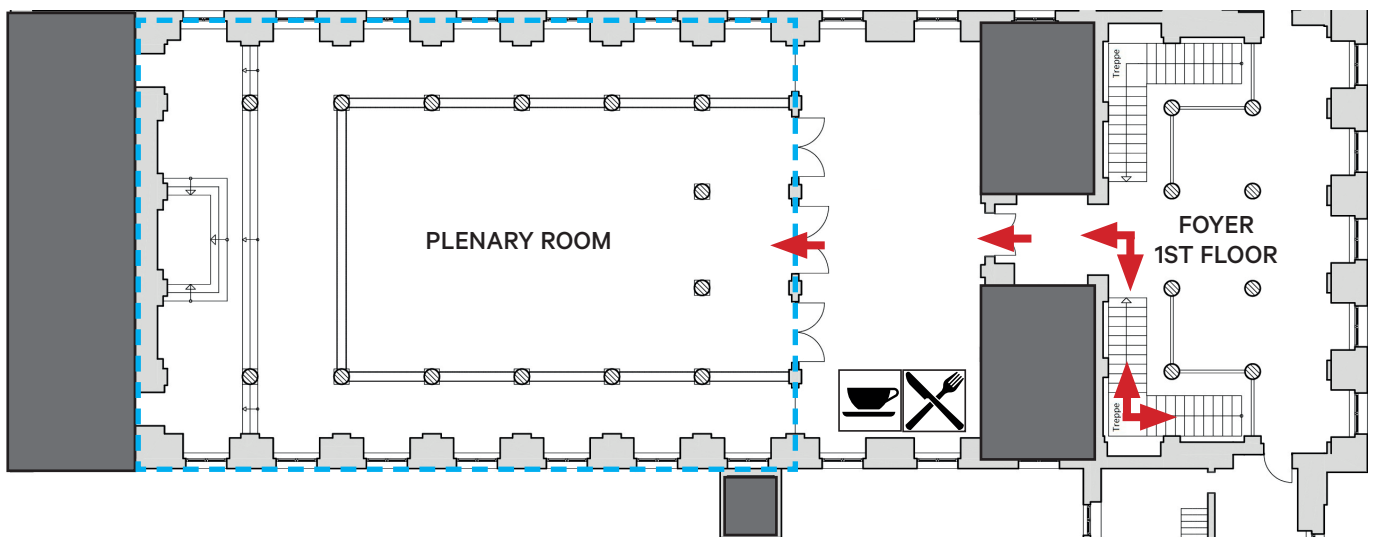
### Forums Language

The forums language will be English.

VENUES AT THE WILHELMSPLATZ



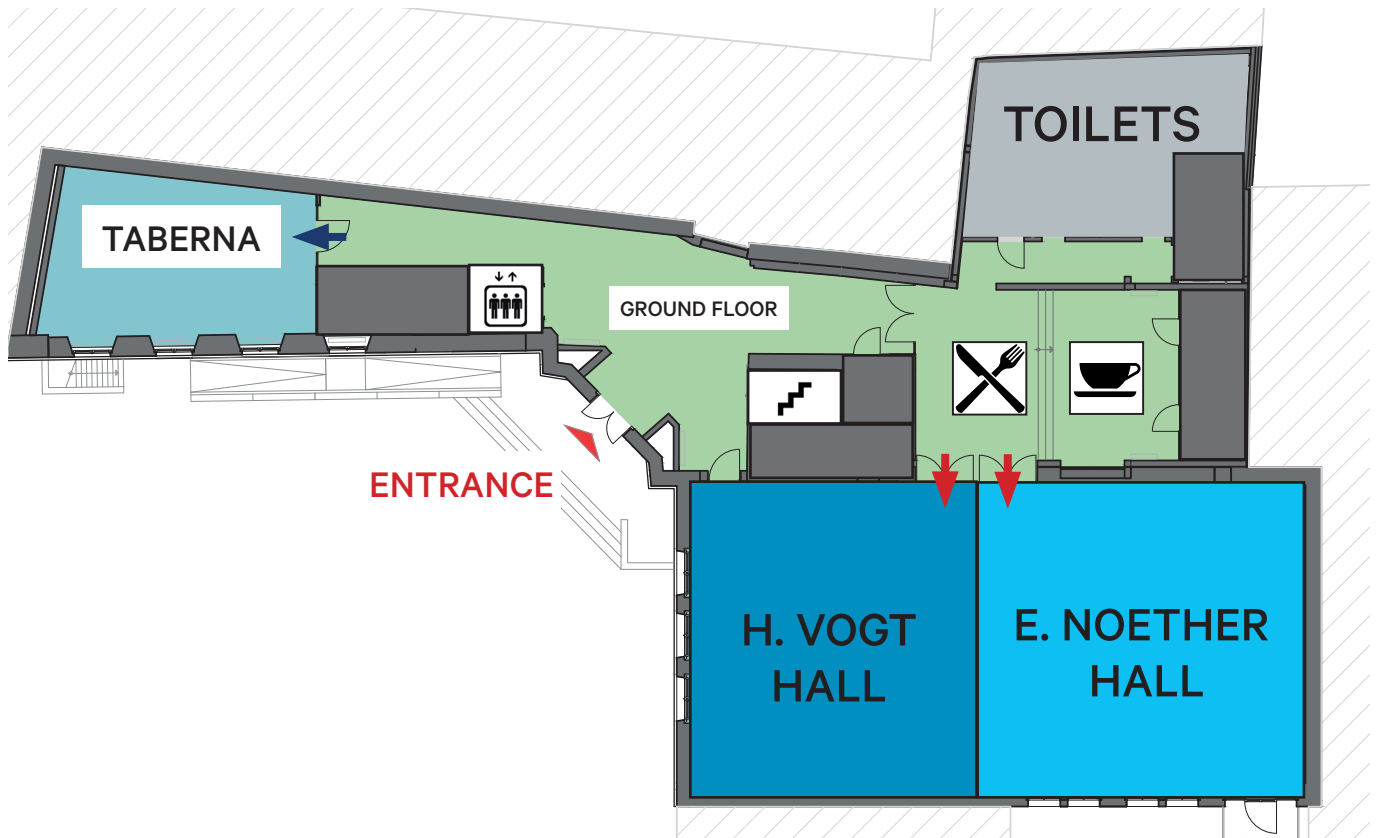
ASSEMBLY HALL AT THE WILHELMSPLATZ - AUDITORIUM



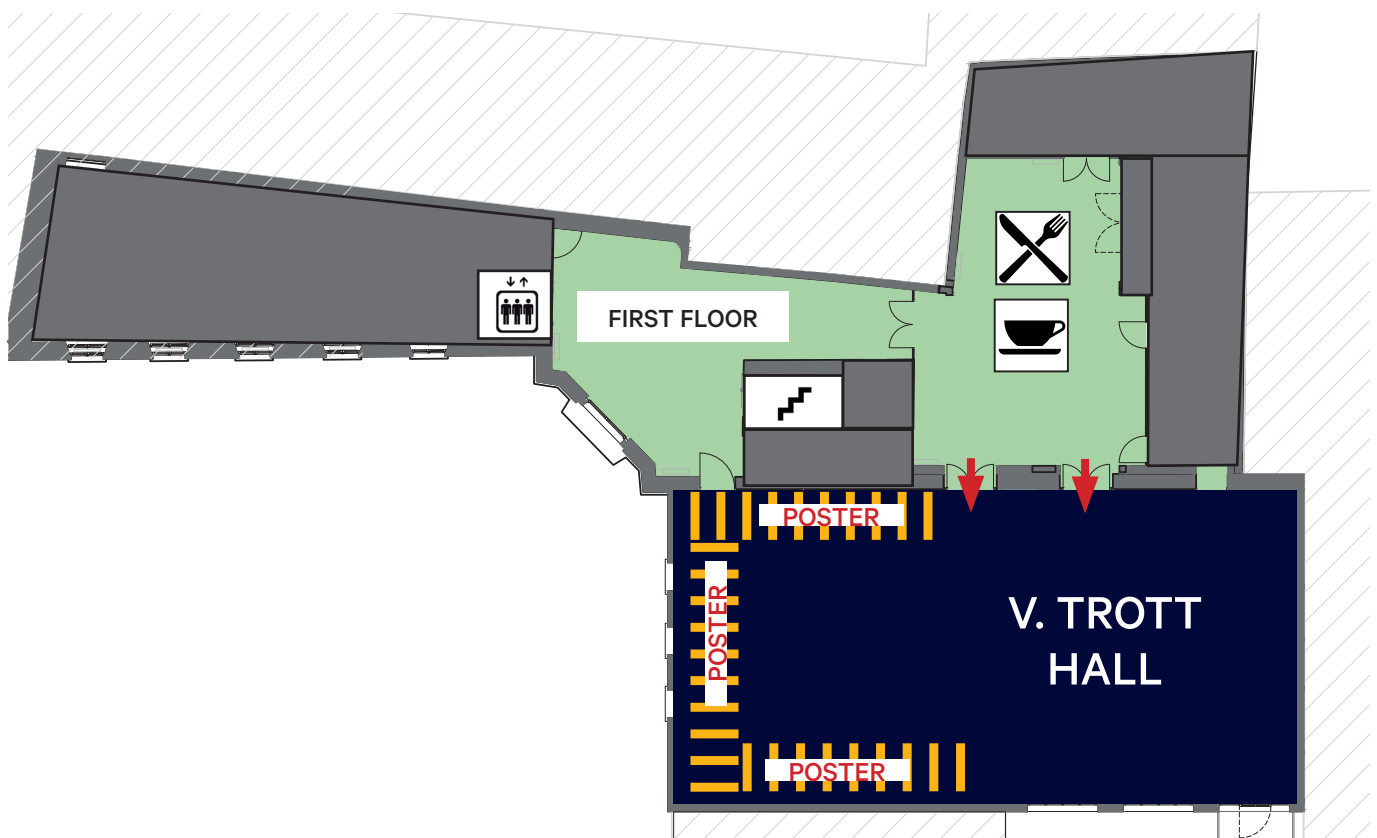
**PLEASE NOTICE:**

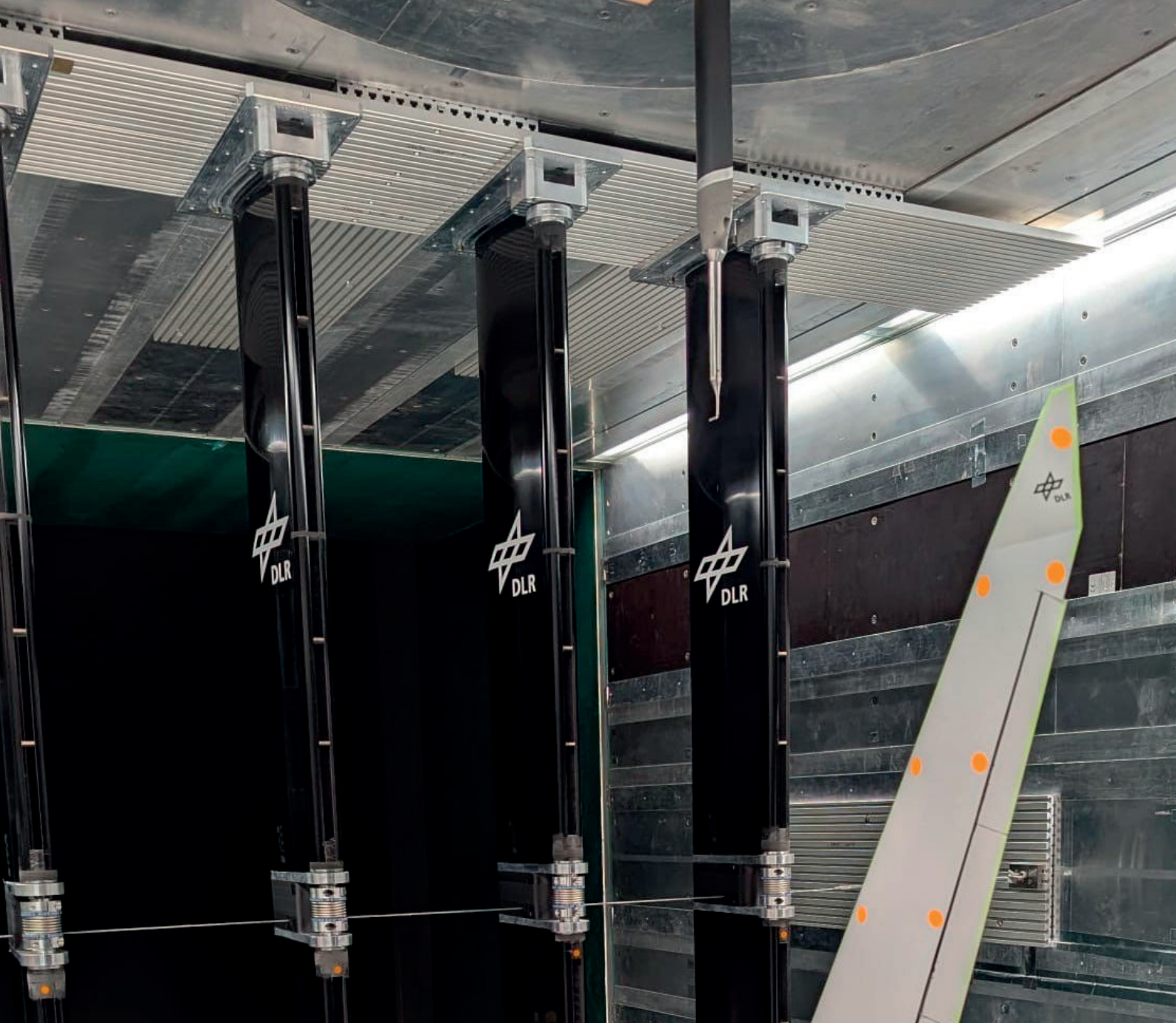
- The registration desk is located on the ground floor near the main entrance of the Assembly Hall at Wilhelmsplatz.
- A central cloakroom is not provided. Instead, cloakroom facilities are available in all individual rooms.
- Luggage storage is only available on 18 June 2026 and is located on the first floor of the Assembly Hall (signposted on site)

ALTE MENSA - GROUND FLOOR



ALTE MENSA - FIRST FLOOR





## THE GERMAN AEROSPACE CENTER

DLR is the Federal Republic of Germany's research centre for aeronautics and space. We conduct research and development activities in the fields of aeronautics, space, energy, transport, security and digitalisation. The German Space Agency at DLR plans and implements the national space programme on behalf of the federal government. Two DLR project management agencies oversee funding programmes and support knowledge transfer.

Climate, mobility and technology are changing globally. DLR uses the expertise of its 55 research institutes and facilities to develop solutions to these challenges. Our 10,000 employees share a mission – to explore Earth and space and develop technologies for a sustainable future. In doing so, DLR contributes to strengthening Germany's position as a prime location for research and industry.