



**The 65th Israeli Annual Conference
on Aerospace Sciences**

Program

**19 March, 2026
Dan Panorama Hotel, Tel-Aviv**



The 65th Israeli Annual Conference on Aerospace Sciences

IACAS 2026 – PROGRAM		
Time/Code	Session	Hall
9:00-13:00		
9:00-9:10	Welcoming Address: BG (res.) Eytan Eshel, Chair, IACAS-2026	Hall A
9:10-10:00	Keynote Speaker: Boaz Levi, President and CEO, Israel Aerospace Industries (IAI)	
10:00-10:50	Plenary Lecture I: Prof. Eli Livne of the University of Washington	
Coffee Break 10:50-11:20		
11:20-12:10	Plenary Lecture II: Pro. Masha Folk, Massachusetts Institute of Technology (MIT)	
12:10-13:00	Plenary Lecture III: Prof. Meir Ariel, Tel Aviv University	
Lunch 13:00-14:00		
Parallel Sessions 14:00-16:00		
ThL1T1	Guidance, Navigation, and Control I	A
ThL1T2	Aerodynamics, Fluid Dynamics, and Aeroacoustics I	B
ThL1T3	Combustion and Reactive Flows	C
ThL1T4	Aeroelasticity, Fluid-Structure Interaction	D
ThL1T5	Astrodynamics and Space Systems	E
Coffee Break 16:00-16:20		
Parallel Sessions 16:20-18:20		
ThL2T1	Guidance, Navigation, and Control II	A
ThL2T2	Aerodynamics, Fluid Dynamics, and Aeroacoustics II	B
ThL2T3	Fluid Mechanics, Flow Control, Turbulence and Transition	C
ThL2T4	Aerospace Design, Manufacturing, and Maintenance	D
ThL2T5	Computational Fluid Dynamics, Meshing and Visualization	E

Guidance, Navigation, and Control I

Hall A

14:00-14:20	Observability of Target Tracking Using Range and Range-Rate Measurements with Coupling Constraint <i>Liat Peled-Eitan (RAFAEL), Ilan Rusnak (IR Consulting)</i>
14:20-14:40	Pose Determination using Dual vector Observations <i>Caitong Peng (Ben-Gurion University), Daniel Choukroun (Ben-Gurion University of the Negev)</i>
14:40-15:00	A Rapidly Switching Interacting Multiple Model Algorithm <i>Zohar Kolberg (Rafael), Daniel Sigalov (Rafael)</i>
15:00-15:20	Robust Control of a Hypersonic Gliding Vehicle <i>Bar Gawi (Technion), Moshe Idan (Technion), Oded Golan (Technion)</i>
15:20-15:40	Manoeuvre Load Alleviation Control Design for the T-Flex Demonstrator UAV <i>Előd István Király (HUN-REN), Izabel Laura Nagy (Budapest University), Balint Vanek (MTA SZTAKI), Bela Takarics (HUN-REN)</i>
15:40-16:00	AI-Aided Gyroscope Calibration and Gyrocompassing <i>Itzik Klein (University of Haifa)</i>

Aerodynamics, Fluid Dynamics, and Aeroacoustics I

Hall B

14:00-14:20	Simulation of the Technion Arc-Plasma Heated Wind Tunnel Using COMSOL <i>Jonathan Shevah (Technion), David Yanuka (Technion)</i>
14:20-14:40	Computational Study of Static Structural Deformation Effects on Small-Scale Rotor Aeroacoustics in Hover <i>Hadar Ben-Gida (Israeli Air Force), Aharon Karon (IAI), Aleksandra Kvurt (IAI)</i>
14:40-15:00	Evaluation of Noise Modulation Metrics for Small-Scale Low-Reynolds Rotor in Hover <i>Aleksandra Kvurt (IAI), Aharon Karon (IAI), Hadar Ben-Gida (Israeli Air Force)</i>
15:00-15:20	Psychoacoustic Analysis of High-Frequency Rotor Noise Modulated by the Blade-Pass Frequency <i>Aharon Karon (IAI), Aleksandra Kvurt (IAI), Hadar Ben-Gida (Technion)</i>
15:20-15:40	Tunable Bifurcation-Based Micro Flow Sensor for Aeronautical Applications <i>Ivan Litvinov (Tel Aviv University), Gal Spaer Milo (Tel Aviv University), Alex Liberzon (Tel Aviv University), Slava Krylov (Tel Aviv University), Zvika Fayer (MAAFAT IDF), Eldad Yichie (Rafael LTD), Haim Ben Bahar (Rafael LTD), Ronen Maimon (Rafael)</i>
15:40-16:00	Linear stability theory revisited using the BGK approximation of the Boltzmann equation <i>Mor Aharoni (Technion), Vassilis Theofilis (Technion)</i>

Combustion and Reactive Flows

Hall C

14:00-14:20	Investigation of Double Structure Cellular Detonations with Two-Step Chemical Kinetics <i>Yotam Erel (Tel Aviv University), Yoram Kozak (Tel Aviv University), Daniel Jalontzki (Tel Aviv University), Moran Ezra (Tel Aviv University), Oren Peles (Tel-Aviv University)</i>
14:20-14:40	Flame Thickening in Binary Spray Diffusion Flames <i>Gershon Katz (Technion), J. Barry Greenberg (Technion)</i>
14:40-15:00	Hypergolic ignition of sodium borohydride-polyethylene fuel under hydrogen peroxide sprays <i>Saar Levi (Technion)</i>
15:00-15:20	Low Regression Rate Limits of HTPB Based Fuels in Solid Fuel Ramjets <i>Ethan Loskove (Technion)</i>
15:20-15:40	Enhancing Solid Propellant Burning Rates Using Expandable Graphite Additives under High-Pressure Conditions <i>Noa Hanina (Technion), Alon Gany (Technion)</i>
15:40-16:00	Static Firing testing of a Solid Fuel Ramjet Projectile <i>Itamar Levitan (Technion), Alon Gany (Technion)</i>

Aeroelasticity, Fluid-Structure Interaction

Hall D

14:00-14:20	Aeroelasticity of Plates with Nonuniform Boundary Conditions Ranging from Pinned to Clamped <i>Yishai Glam (Technion), Maxim Freydin (Technion)</i>
14:20-14:40	Development of a Control-Oriented Aeroelastic Model for the mini MUTT UAV <i>Izabel Laura Nagy (Budapest University of Technology and Economics), Előd István Király (HUN-REN Institute for Computer Science and Control), Balint Vanek (Hungarian Academy of Sciences), Bela Takarics (HUN-REN Institute)</i>
14:40-15:00	DYNAMIC RESPONSE OF MANEUVERING AIRCRAFT <i>Dor Naftaly (Israeli Air Force), Daniella Raveh (Technion)</i>
15:00-15:20	Aero-Structural Modeling and Prediction of Transonic Shock-Buffet Loads on an F-16 Wing <i>Tzvil Nahom Jidovetski (Israeli Air Force), Daniella Raveh (Technion), Michael Iovnovich (IAF)</i>
15:20-15:40	Static Aeroelastic Behaviour of Very Flexible Straight and Swept Wings <i>Suryapratap Shinde (Technion), Daniella Raveh (Technion)</i>
15:40-16:00	Advances in Aeroservoelastic Stability Testing Using Parametric Flutter Margins <i>Moti Karpel (Technion)</i>

Astrodynamics and Space Systems

Hall E

14:00-14:20	Autonomous Collocation of Geostationary Satellites <i>Dor Katz (Technion), Pini Gurfil (Technion)</i>
14:20-14:40	3D Space Interception <i>Shaul Gutman (Technion), Ram Massas (Technion)</i>
14:40-15:00	Optimal trajectories near the sun in General Relativistic setting <i>Tomer Fine (The Technion), Vladimir Martinusi (Technion)</i>
15:00-15:20	Geometric Analysis and Configuration Optimization of LEO Doppler-based Navigation <i>Carlos Caravaca-Gallego (The Technion), Pini Gurfil (Technion), Hector P. Rotstein (Technion)</i>
15:20-15:40	Extending Hamiltonian Normalization Toward Control of Large Aperture Satellite Formations <i>Ilay Lazarovich (Technion), Vladimir Martinusi (Technion)</i>
15:40-16:00	Matrix Formulation of Pseudo-Riemannian Geometry <i>Vladimir Martinusi (Technion), Iris Kanter (Technion)</i>

Guidance, Navigation, and Control II

Hall A

16:20-16:40	Robustness of the Kalman filter in a deterministic framework: the continuous time case <i>Martin Weiss (Technion)</i>
16:40-17:00	Achieving Optimal Performance by AI <i>Joseph Z. Ben-Asher (Technion)</i>
17:00-17:20	WIF-Based Interacting Multiple Model Algorithm <i>Daniel Sigalov (Rafael), Aharon Gal (Rafael)</i>
17:20-17:40	Single-Decision-Time Optimization for Cooperative Shoot-Shoot-Look Engagements <i>Kirill Reznik (Technion), Gleb Merkulov (Technion), Tal Shima (Technion)</i>
17:40-18:00	Optimal Relative Terminal Angle Guidance for Accelerating Exo-atmospheric Pursuers <i>Dekel Fishler (Technion), Tal Shima (Technion)</i>
18:00-18:20	A Pointwise Minimum Norm Control Scheme for a Generic Air-Breathing Hypersonic Vehicle with State Constraints <i>Omer Wexler (Technion), Moshe Idan (Technion)</i>

Aerodynamics, Fluid Dynamics, and Aeroacoustics II

Hall B

16:20-16:40	Closed-Loop Optimization and Analysis of Deployable Vortex Generators on a NACA 2412 Airfoil <i>Leah Ben-Tzur (University of Toronto), Alex Liberzon (Tel Aviv University)</i>
16:40-17:00	Ultra-Low-Cost Ludwieg Tube Wind Tunnel <i>Kostiantyn Kuzmenko (Technion), David Greenblatt (Technion)</i>
17:00-17:20	Calculation of dynamic stability coefficients using Ansys Fluent <i>Dvir Mendler (Ansys)</i>
17:20-17:40	A Computational Study of Aero-Optical Distortions Due to Rotorcraft Wakes <i>Shimon Julius (Elbit), Ori Haber (Elbit)</i>
17:40-18:00	Dielectric Barrier Discharge Plasma Actuators for Hypersonic Boundary Layer Control <i>Nadav Friedman (Technion), Kostiantyn Kuzmenko (Technion), David Greenblatt (Technion)</i>
18:00-18:20	Morphological effects of microfluidic sheet sprays on local heat transfer enhancement <i>Alexandros Peteinaris (Technion), Alexandros Terzis (Technion)</i>

Fluid Mechanics, Flow Control, Turbulence and Transition

Hall C

16:20-16:40	Bio-Inspired Flow Control on a Finite Wing during Various Dynamic Motions <i>Alok Bose (Rensselaer Polytechnic Institute), Kieran Schuler (Rensselaer Polytechnic Institute), Miki Amitay (RPI)</i>
16:40-17:00	Global Stability analysis of Cone-Slice-Ramp in Mach 6 flow <i>Vojtech Pezlar (Technion), Vassilis Theofilis (Technion)</i>
17:00-17:20	Sequencing and analysing linear modal instability mechanisms on the HIFiRE-1 vehicle at Mach 6 cruise flight <i>Gilad Raz (Technion), Vassilis Theofilis (Technion), Vojtech Pezlar (Technion)</i>
17:20-17:40	A summary of linear instability phenomena potentially driving laminar flow to transition to turbulence on the surface of waveriders in high-altitude cruise flight <i>Vojtech Pezlar (Technion), Angelos Klothakis (Technical University of Crete), Ioannis Nikolos (Technical University of Crete), Vassilis Theofilis (Technion)</i>
17:40-18:00	Kinetic linear stability theory in the continuum limit <i>Yuval Rovinsky (Technion), Vassilis Theofilis (Technion)</i>
18:00-18:20	Induced Transition to Turbulence over a Two-Dimensional Wedge at Hypersonic Speeds <i>Vamsi Krishna Talluri (Technion), Jacob Cohen (Technion), Soumya Ranjan Nanda (Technion)</i>

Aerospace Design, Manufacturing, and Maintenance

Hall D

16:20-16:40	Crippling in Bending Investigation <i>Steve Katzeff (IAI)</i>
16:40-17:00	Micromechanics-based Fatigue Damage Modeling of Laminated Composite Structures <i>Yaara Lavi (IAI), Aviad Levi Sasson (IAI), Rami Eliasy (Tel Aviv University), Yuval Freed (IAI), Yael Buimovich (IAI), Rami Haj-Ali (Tel Aviv University)</i>
17:00-17:20	Prestressed Cyclic SuperElements for Harmonic Balance Method <i>Ravoux Julien (Ansys), Yohan Gouetta (Ansys), Ben Cohen (Ansys)</i>
17:20-17:40	Micro Gas Turbine Conversion from Turbojet to Variable-Bypass Geared Turbofan: Mechanical Design and Preliminary Experiments <i>Pavel Kolos (Technion), Michael Palman (Technion), Nikita Kositskii (Technion), Alexander Rachman (Technion), Ron Miezner (Technion), Beni Cukurel (Technion), Valeria Andreoli (Purdue), Guillermo Paniagua (Zucrow Laboratories, Purdue)</i>
17:40-18:00	AI and ML Strategies to predict CFD results <i>Naor Zadok (Tel Aviv University), Nadav Itzhak (Rafael)</i>
18:00-18:20	Optimization of Multi-Material Panels for Enhanced Aerodynamic Stability <i>Ameer Marzok (Technion)</i>

Computational Fluid Dynamics, Meshing and Visualization

Hall E

16:20-16:40	A novel phase field approach for dynamic fracture based on the mixed-Lagrangian formulation <i>Sudipta Naskar (Technion), Ameer Marzok (Technion)</i>
16:40-17:00	Numerical Framework for Flash Boiling Predictions Under Rapid Depressurization Conditions <i>Omry Magen (Tel Aviv University), Yoram Kozak (Tel Aviv University), Nilojendu Banerjee (University of Pavia), Marco Marengo (University of Pavia), Tali Bar-Kohany (Tel Aviv University)</i>
17:00-17:20	Radial flow cavitation between two overlying plates with varying gap for water and dodecane liquids <i>Samruddhi Salunke (Student), Igal Gluzman (Technion)</i>
17:20-17:40	Rapid simulation for high-speed external flows using Ansys Discovery <i>Dvir Mendler (Ansys)</i>
17:40-18:00	Toward Spray Combustion Simulation Capabilities: A Multi-Phase Multi-Fluid Approach <i>Sahar Shpitz (ISCFDC), Yuval Levy (Israeli CFD Center), Yuval Dagan (Technion)</i>
18:00-18:20	Transonic Shock Buffet LBM/VLES Computations of the ONERA OAT15A Airfoil and JAXA CRM <i>Hadar Ben-Gida (Israeli Air Force)</i>