

The 64th Israel Annual Conference on **Aerospace Science**

Thursday 20 March, 2025

PROGRAM

Event	Time/Venue
 Opening Plenary Lectures Lunch Exhibition stands of IACAS sponsors 	9:00-13:30 Churchill Hall, the Technion
Regular Sessions	13:30-18:00 Faculty of Aerospace Engineering, Technion

sponsors and supporters



IACAS-2025 Program - Table of Content

Thursday 20.3.2025			
Time/Code	Session	Hall	
	8:45-12:00		
9:00-9:10	Welcoming Address: Prof. Uri Sivan, Technion President		
9:10-9:15	Conference Opening: Dr. Yehudit Hocherman, Chair IACAS-2025	-	
9:15-10:05	David A. Vallado, Senior Research Astrodynamicist, COMSPOC		
	Coffee Break 10:05-10:30	Churchill Hall	
10:30-11:20	Professor Wei Shyy, Chair Professor at the Hong Kong University of Science and Technology (Guangzhou)		
11:20-12:10	TBD		
Lunch 12:10-13:30			
	13:30-15:30		
ThL1T1	Guidance, Navigation and Control	А	
ThL1T2	Computational Fluid Dynamics	В	
ThL1T3	Flow Stability and Control I	С	
ThL1T4	Astrodynamics and Space Systems I	D	
ThL1T5	Aerodynamics & Aeroacoustics	E	
ThL1T6	Aeroelasticity & Fluid-Structure Interaction	F	
<u>ThL1T7</u>	Propulsion and Combustion	G	
ThL1T8	Aerospace Design		
Coffee Break 15:30-16:00			
Thu 2T4	16:00-18:00	1	
ThL2T1	Propulsion, Combustion and Energy Systems	А	
ThL2T2	Flow Stability and Control II	В	
ThL2T3	Aerospace Systems and MDO	С	
ThL2T4	Al and Autonomy	D	
ThL2T5	Aerodynamics, Hydrodynamics and Aeroacoustics	E	
ThL2T6	Astrodynamics and Space Systems II	F	
ThL2T7	Solid Mechanics and Aerospace Materials	G	



Click here for Session Halls Map at the Faculty of Aerospace Engineering



Keynote Lectures

9:15-10:05 ThPl1

Lt Col (USAF Ret) David A. Vallado, Senior Research Astrodynamicist, COMSPOC

Challenges to Accurate LEO Satellite Prediction

Chair: Dr. Vladimir Martinusi

Accurate propagation of Low Earth Orbiting satellites is increasingly important for conjunction analyses as the region becomes more densely populated. Standard perturbation force models are successfully used for Orbit Determination to produce accurate epoch states. But what happens as these states are predicted into the future? The uncertainty increases rapidly, somewhat independent of the accuracy of the initial state. I review the dominant perturbing forces and focus on gravity and atmospheric drag as sources of the increased uncertainty in prediction.

About David A. Vallado

Lt Col (USAF Ret) David A. Vallado is currently working as a Senior Research Astrodynamicist with COMSPOC in the Center for Space Standards and Innovation. He is the author of the advanced astrodynamics textbook, Fundamentals of Astrodynamics and Applications (5th edition, Microcosm, 2022). He is a Fellow in the American Astronautical Society (2006).

He attended the United States Air Force Academy and majored in Astronautical engineering, receiving his Bachelor of Science in 1980. Lt Col Vallado earned a Masters of Science in Systems Management from the University of Southern California in 1982. He then attended the Air Force Institute of Technology (AFIT), where he earned a Masters of Science in Astronautical Engineering in 1984.

His AF assignments include serving as a Project Officer for Stage I of the PEACEKEEPER missile, analysis for the Strategic Air Command Staff at the 544th Strategic Intelligence Wing, an instructor in the Department of Astronautics at the US Air Force Academy, several research scientist activities at AFRL, and analysis at US Space Command. After retiring from the Air Force, he was a principal engineer with Raytheon Intelligence and Information Systems in Denver CO and an Astrodynamics Researcher with Analytical Graphics Inc.

An avid mountain climber, he has hiked all 58 mountains in Colorado over 14000 feet, twice. Dave's other interests include jogging, biking, woodworking, house construction, classical piano, swimming, and square dancing.



Churchill Hall

Plenary Lectures

10:30-11:20 ThPl2

Professor Wei Shyy

Low altitude air mobility, low orbit satellites: opportunities, challenges and sustainability

Chair: Distinguished Professor Emeritus Daniel Weihs

In the present era of fast emergence and advancement of innovative ideas and new technologies, we are seeing unprecedented opportunities as well as challenges. In the civilian aerospace sector, low orbit satellites of altitude up to 2,000 km, equipped with advanced sensing and communication capabilities; and low altitude air mobility, including drones, un-crewed and crewed aerial vehicles, from ground to around 2 km, are two fast moving fronts. Individually and collaboratively, they present new frontiers in the global and regional contexts, including sustainability, commerce, emergency response and risk mitigation. In this lecture, examples will be presented along with technical issues to highlight implications and issues associated with these developments.

About Professor Wei Shyy

Professor Wei Shyy is a Chair Professor at the Hong Kong University of Science and Technology (Guangzhou). He was President of the Hong Kong University of Science and Technology and Chair Professor of Mechanical and Aerospace Engineering. Prior to joining HKUST in 2010, he was Clarence L. "Kelly" Johnson Collegiate Professor and Chairman of the Department of Aerospace Engineering of the University of Michigan.

He was the Principal Investigator of several multi-institutional research projects, funded by the US Government and industries, on future space transport, bio-inspired flight, and computational aero-science. He is General Editor of the Cambridge Aerospace Book Series published by the Cambridge University Press; and Co-Editor-in-Chief of Encyclopedia of Aerospace Engineering, a major reference work published by Wiley-Blackwell.

Professor Shyy is an elected member of Academia Sinica (Taipei), an agenda contributor of the World Economic Forum, and Fellow of the American Institute of Aeronautics and Astronautics (AIAA). He has received awards for his research and professional contributions, including the AIAA 2003 Pendray Aerospace Literature Award, the ASME 2005 Heat Transfer Memorial Award, and The Engineers' Council (Sherman Oaks, CA) 2009 Distinguished Educator Award. In 2021, the French Government made him an Officer of the Legion of Honor. In 2023, the International Conference on Computational & Experimental Engineering and Sciences (ICCES) honored him the Satya N. Atluri Award.



ThL1T1 Hall A **Guidance, Navigation and Control** Chair: Daniel Choukroun Ben-Gurion University of the Negev Co-Chair: Ilan Rusnak Rafael 13:30-13:50 ThL1T1.1 Optimal pure-pursuit guidance law with uncertain time-of-flight Ilan Rusnak Rafael 13:50-14:10 ThL1T1.2 Symmetry-constrained formation maneuvering Zamir Martinez Technion Daniel Zelazo Technion 14:10-14:30 ThL1T1.3 Missile guidance with doppler information only in 3D Ilan Rusnak Rafael Liat Peled-Eitan Rafael ThL1T1.4 14:30-14:50 Midcourse guidance for hypersonic glide vehicle interception Michael Urman Technion Oded Golan Technion Vitaly Shaferman Technion 14:50-15:10 ThL1T1.5 Error analysis of a dual quaternion batch estimator Caitong Peng Ben-Gurion University of the Negev **Daniel Choukroun** Ben-Gurion University of the Negev 15:10-15:30 ThL1T1.6 A New atmospheric disturbances estimation method for rotorcraft Technion Sergey Nazarov Per-Olof Gutman Technion



ThL1T2 Hall B **Computational Fluid Dynamics** Chair: Vassilis Theofilis Technion Israeli CFD Center Co-Chair: Yuval Levy 13:30-13:50 ThL1T2.1 Effect of Turbulence Modeling on the Shock Buffet Phenomenon Prediction Yuval Levy Israeli CFD Center Sahar Shpitz Technion Daniella Raveh Technion 13:50-14:10 ThL1T2.2 Flow simulation of waveriders at off-design conditions **Angelos Klothakis Technical University of Crete** Ioannis Nikolos **Technical University of Crete** Vassilis Theofilis Technion 14:10-14:30 ThL1T2.3 Wall Function LES using Fluent GPU solver and Fluent Rapid Octree mesh **Dvir Mendler** Ansys 14:30-14:50 ThL1T2.4 Very large eddy simulations of the flow within a F-35's weapon bay with an internal store Ron Efrati Israeli Air Force Hadar Ben-Gida Israeli Air Force 14:50-15:10 ThL1T2.5 Terrain Ridgelines Detection Based on Streamlines Baruch F. Karlin 15:10-15:30 ThL1T2.6 Ablation Computational Simulation using Ansys Fluent Dvir Mendler **Ansys**

Ansys

Sunil Chadha



ThL1T3		Hall C
	Flow Stability and Control I	
Chair: Michael Co-Chair: Alexa	·	Technion Technion
13:30-13:50		ThL1T3.1
Mario Del Mas	Analytical flow solutions in rectangular microfluidic channels based on the darcy-brinkman model tro	Technion
Alexandros Ter	zis	Technion
13:50-14:10		ThL1T3.2
	Stability analysis of the non-isentropic one-dimensional flow in a scramjet isolator	
Shahaf Haiman Michael Karp	· · · · · · · · · · · · · · · · · · ·	Technion Technion
14:10-14:30		ThL1T3.3
Vassilis Theofil	Linear stability of a weak viscous shock layer is	Technion
14:30-14:50		ThL1T3.4
Stability a Doron Schwart Michael Karp	analysis of forced and unforced flow fields around cylinders in cro z	ssflow Technion Technion
14:50-15:10		ThL1T3.5
	Particle clustering and turbulence modulation in eulerian particle-laden flow simulations	
AJAY DHANKAF Yuval Dagan	•	Technion Technion
15:10-15:30		ThL1T3.6
Roi Baruch Igal Gluzman	Investigation of oil flow topology, pressure distribution, and drag in separated flow over low-Reynolds-number airfoil	Technion Technion



ThL1T4		Hall D
	Astrodynamics and Space Systems I	
Chair: Vladimir M Co-Chair: Alexand		Technion Technion
13:30-13:50		ThL1T4.1
Netwo Alexander Batkhi 13:50-14:10	rk of symmetric periodic families in the Hill 3-body probl n	Technion
	Uncertainty propagation using Riemannian geometry si	Technion
14:10-14:30		ThL1T4.3
Constant-ma Michal Pushkov SHRIBHARATH BA Pini Gurfil	gnitude low-thrust orbital transfer with final-approach ta	Technion Technion Technion
14:30-14:50		ThL1T4.4
Naama Gilat Oded Golan Vitaly Shaferman	Optimal control for as solar sail around L1'	Technion Technion Technion
14:50-15:10		ThL1T4.5
Yuval Hammer Ido Ben Harosh Ivan Goncharov Ira Wolfson Elad Denenberg	Technical requirements for optical sensors in autonomous space situational awareness Braude Academic College of E	Braude Braude Braude Braude Engineering
15:10-15:30		ThL1T4.6
Alex Frid Carlos Caravaca-G Pini Gurfil	Satellite Signals-of-Opportunity-Based Navigation: From Simulation to Real-World Implementation	Technion Technion Technion



ThL1T5 Hall E **Aerodynamics & Aeroacoustics** Chair: Oksana Stalnov **Elbit Systems** Co-Chair: Hadar Ben-Gida Technion 13:30-13:50 ThL1T5.1 Water sheet breakup dynamics and spray characterization for confined leading-edge cooling Alexandros Peteinaris Technion Alexandros Terzis Technion 13:50-14:10 ThL1T5.2 Characterizing the aerodynamic degradation of a damaged UAV pusher propeller Elad Bar On Technion Yosef Pikel Israeli Air Force Hadar Ben-Gida Israeli Air Force 14:10-14:30 ThL1T5.3 Swept and tapered wing in dynamic motion Sarah Sullivan Rensselaer Polytechnic Institute **Evan Mahns** Rensselaer Polytechnic Institute Miki Amitay RPI 14:30-14:50 ThL1T5.4 Optimizing drones delivery path for low-noise flight **Barak Deutscher** Technion Oksana Stalnov **Elbit Systems** Hadar Ben-Gida Technion 14:50-15:10 ThL1T5.5 Experimental analysis of a vibro-acoustic response of an airborne structure to boundary layer excitation Maavan Naschletashvili Technion Oksana Stalnov **Elbit Systems** Hadar Ben-Gida Technion Thl 1T5.6 15:10-15:30 Sustainable flight and maneuverability of guided projectiles

Rafael

Rafael

Rafael

at transonic speeds via circulation control

Dor Polonsky Gali Alon Tzezana

Alon Dahan



ThL1T6		Hall F
А	Aeroelasticity & Fluid-Structure Interaction	1
Chair: Maxim Frey Co-Chair: Moti Ka		Technion Technion
13:30-13:50		ThL1T6.1
Stati Bar Revivo Daniella Raveh	ic aeroelasticity and stability of very flexible swept v	wings Technion Technion
13:50-14:10		ThL1T6.2
Maxim Freydin	Aeroelasticity of plates in supersonic channel flow	Technion
14:10-14:30		ThL1T6.3
Tzlil Nahom Jidov Michael Iovnovich Daniella Raveh		Israeli Air Force Israeli Air Force Technion
14:30-14:50		ThL1T6.4
Dor Naftaly Daniella Raveh	Aeroelastic coupling of hard maneuvering aircraft	Israeli Air Force Technion
14:50-15:10		ThL1T6.5
Guy Gordon Biber Moti Karpel	Numerical simulation of flutter flight tests using the parametric flutter margin method rstein	Technion Technion
15:10-15:30		ThL1T6.6
Advance	ments in in-flight aeroelastic sensing: real-time pre deflection, load, and rigid angle of attack using machine learning from ground test data	diction of Technion

Technion

Daniella Raveh



ThL1T7		Hall G
	Propulsion and Combustion	
Chair: Dan Mic Co-Chair: Eran		Technion Technion
13:30-13:50		ThL1T7.1
	Pressure effect on the burning rate of solid propellants with expandable graphite additives	
Noa Edri Alon Gany		Technion Technion
13:50-14:10		ThL1T7.2
Itamar Levitan Alon Gany	Investigating a gun-launched solid fuel ramjet projectile	Technion Technion
14:10-14:30		ThL1T7.3
Enhar Sagi Dinisman Alon Gany	ncing water-breathing ramjet performance with boron ac	Iditive Technion Technion
14:30-14:50		ThL1T7.4
Alexander Dolr Dan Michaels	Experimental study of mode transition in a cavity-based dual-mode scramjet combustor nik	Technion Technion
14:50-15:10		ThL1T7.5
	Hydrogen propulsion: the fundamental equation for H2 in its liquid, saturated, and gaseous states	
Eran Sher Shir Levi		Technion Technion
15:10-15:30		ThL1T7.6
Compu	iter Vision Approach for Analysis of Numerical and Experi Detonation Cellular Structure Images	mental
Daniel Jalontzk Alon Zussman Guni Sharon Sumedh Pendu Yoram Kozak	Tel A Texas A8 ırkar Texas A8	viv University viv University M University M University viv University



ThL1T8 Hall H

Aerospace Design

Chair: Ilan Berlowitz IBAero
Co-Chair: Ariel Dvorjetski TBD

13:30-13:50 ThL1T8.1

Electro-hydrostatic actuation and steering system for nose landing gear

Ilan Berlowitz

IBAero

13:50-14:10 ThL1T8.2

Comparative analysis of aircraft freighter conversion strategies

Ilan Berlowitz IBAero

14:10-14:30 ThL1T8.3

Development of regional aircraft composite leading edge for bird strike sustainability - a methodology review

Yahav Angel Israel Aerospace Industries
Adam Sawday IAI
Eduardo Eigenberg Israel Aerospace Industries

14:30-14:50 ThL1T8.4

Helicopter engine's power estimation using regular flight data

Ariel Dvorjetski Israeli Air Force Liron Darhi Israeli Air Force

Aperstein Yehudit Afeka College of Engineering



ThL2T1 Hall A **Propulsion, Combustion and Energy Systems** Chair: Moshe Zilberman Azrieli Academic College of Engineering Co-Chair: David Yanuka Technion 16:00-16:20 ThL2T1.1 Collision coalescence study of impinging spray jets **Ariel Sharon** Technion Technion Yeshayahou Levy 16:20-16:40 ThL2T1.2 Optimizing the performance of Savonius vertical axis wind turbines for use in urban high-rise buildings and rural locations Moshe Zilberman Azrieli Academic College of Engineering 16:40-17:00 ThL2T1.3 Simplified modeling of constrictor plasma at the Technion arc heated wind tunnel David Yanuka Technion 17:00-17:20 ThL2T1.4 Hydrogen Generation from Water and Aluminum with different additives Elinor Kostjukovsky Technion Alon Gany Technion



ThL2T2 Hall B

Flow Stability and Control II

Chair: Igal Gluzman Technion
Co-Chair: Hadar Ben-Gida Technion

16:00-16:20 ThL2T2.1

Lattice Boltzmann method simulations of the laminar flow in a two-dimensional double cavity configuration

Itamar BlumenfeldTechnionHadar Ben-GidaTechnion

16:20-16:40 ThL2T2.2

Wake measurements of heavy vehicle rear-end models with custom-designed passive flow control devices

Niv-Haim Mizrahi Tel Aviv University
Elizaveta Dubrovskaya Tel Aviv University
Ofek Katz Tel Aviv University
Yarden Turgeman Tel Aviv university
Alex Liberzon Tel Aviv University
Oksana Stalnov Elbit Systems

16:40-17:00 ThL2T2.3

Linear stability of complex compressible cavity flows

Vojtech Pezlar Czech Technical University in Prague
Marlon Mathias University of Sao Paulo
Vassilis Theofilis Technion
Marcello Augusto Faraco Medeiros University of Sao Paulo

17:00-17:20 ThL2T2.4

Instability and transition of the flow over a surface gap

Victor Barcelos Victorino

Felipe Oliveira Aguirre

Marcello Augusto Faraco Medeiros

University of Sao Paulo
University of Sao Paulo
University of Sao Paulo



17:20-17:40 ThL2T2.5

Mach effect on instability and transition of the flow over a surface gap

Felipe Oliveira Aguirre

PauloCelso Vieira Paino

Hadar Ben-Gida

Technion

Marcello Augusto Faraco Medeiros

University of Sao Paulo

Technion

University of Sao Paulo

17:40-18:00 ThL2T2.6

Stability analysis of shear flows and boundary layers via novel stability criterion that utilizes the small gain theorem

Ofek Frank-Shapir Technion Igal Gluzman Technion



ThL2T3 Hall C **Aerospace Systems and MDO** Chair: Yuval Freed Israel Aerospace Industries Co-Chair: Anna Clarke Technion 16:00-16:20 ThL2T3.1 Genetic algorithm-based approach to load distribution in full-scale structural test design **Boris Dorfman** Israel Aerospace Industries **Efrat Pinhas** Israel Aerospace Industries Yuval Freed Israel Aerospace Industries 16:20-16:40 Thl 2T3.2 Machine learning-based surrogate models for predicting crack growth in aerospace-grade aluminum alloys Yuval Freed Israel Aerospace Industries 16:40-17:00 ThL2T3.3 Leveraging foundation model approach in fluids mechanics systems engineering Shaul Eliahou Niv Israel Aerospace Industries Yotam Gardosh HUJI Asaf Shiloah HUJI 17:00-17:20 ThL2T3.4 Inner Outer Predictive Model Applied to Atmospheric Surface Layer Turbulence Maayan Shimoni Technion

17:20-17:40 ThL2T3.5

Technion

Technion

Ian Jacobi

Anna Clarke

Flight Course Maneuver Optimization for a Fighter Jet in a Threatened Area
Ido Braun

Technion
Joseph Z. Ben-Asher

Technion



Hall D Thl 2T4 **Al and Autonomy** Chair: Itzik Klein University of Haifa Co-Chair: Vadim Indelman Technion ThL2T4.1 16:00-16:20 Hybrid belief space planning with coupled semantic-geometric models **Tuvy Lemberg** Technion Vadim Indelman Technion 16:20-16:40 ThL2T4.2 Real-time sky object detection and classification using YOLO algorithm Cristian Omat Astronomical Institute of the Romanian Academy 16:40-17:00 ThL2T4.3 Detecting GPS spoofing incidents using variational autoencoders Barak Or Technion 17:00-17:20 ThL2T4.4 Enhancing predictive maintenance with transformer-based deep neural network Barak Or Technion 17:20-17:40 ThL2T4.5 Remotely piloted aircrafts automatic takeoff and landing performance evaluation Tsoof Joels **Elbit Systems** 17:40-18:00 ThL2T4.6 Neural inertial dead reckoning and fusion Itzik Klein University of Haifa



ThL2T5 Hall E

Aerodynamics, Hydrodynamics and Aeroacoustics

Chair: Yuval Dagan Technion
Co-Chair: Omry Magen Tel Aviv University

16:00-16:20 ThL2T5.1

Clustering of particle-laden flows in synthetic turbulence

Boaz Ofarim Technion
Orr Avni Technion
Yuval Dagan Technion

16:20-16:40 ThL2T5.2

On the noise modulation of small-scale low-reynolds number rotors of different materials

Aharon Karon Israel Aerospace Industries
Aleksandra Kvurt Israel Aerospace Industries
Jenya Kazarin Technion
Hadar Ben-Gida Technion

16:40-17:00 ThL2T5.3

Utilization of computer vision algorithms for the characterization of coupled interactions between bubbly shocks and cavitation cloud

Elad Zur Technion
Igal Gluzman Technion

17:00-17:20 ThL2T5.4

Modelling steady features of cavitation in radial flow between two overlying disks with varying gaps

Samruddhi Salunke Technion Igal Gluzman Technion



17:20-17:40 ThL2T5.5

Rapid depressurization-induced flash boiling: a theoretical model for positive and negative pressure ranges

Omry Magen	Tel Aviv University
Yoram Kozak	Tel Aviv University
Laura DiLucchio	University of Pavia
Marco Marengo	University of Pavia
Tali Bar-Kohany	Tel Aviv University

17:40-18:00 ThL2T5.6

Eulerian sectional approach for particle erosion in compressible flows

Amir Loyevsky Rafael Ido Immer Rafael Yuval Dagan Technion



ThL2T6		Hall F
	Astrodynamics and Space Systems II	
Chair: Vitaly Shafe Co-Chair: Moshe G		Technion Technion
16:00-16:20		ThL2T6.1
Traje Meir Nemirovsky Pini Gurfil	ectory design and control for missed-thrust rendezvous	Technion Technion
16:20-16:40		ThL2T6.2
Yahli Drucker Vitaly Shaferman	An optimal low-thrust spacecraft interception guidance law with terminal velocity constraints	Technion Technion
16:40-17:00		ThL2T6.3
Deep s	pace navigation using satellite-based radio interferomet	ry
Moshe Golani		Technion
17:00-17:20		ThL2T6.4
Azriel Lorber	A space propulsion system without mass ejection	
17:20-17:40		ThL2T6.5
An optimal so Revital Frenkel Vitaly Shaferman	oft landing guidance law with an approach angle path co	nstraint Technion Technion
17:40-18:00		ThL2T6.6
Explor Geffen Aharoni Tamar Alperin Naama Gilat Iris Kanter Almog Yanku Alex Frid	ing low-cost trajectories to the sun-earth Lagrange poin	Technion Technion Technion Technion Technion Technion



ThL2T7 Hall G

Solid Mechanics and Aerospace Materials

Chair: Ameer Marzok Technion
Co-Chair: Pavel Galich Technion

16:00-16:20 ThL2T7.1

Experimental investigation of external cargo handling system in YASSUR helicopter: a case study of Iranian ballistic missile extraction

Eytan PodvalniIsrael Aerospace IndustriesItay FarajunTechnionBoaz CohenIsrael Aerospace IndustriesFernando ZimmermanIsrael Aerospace Industries

16:20-16:40 ThL2T7.2

An investigation into semi-stabilized unsymmetrical thin-walled structure
Steve Katzeff Israel Aerospace Industries

16:40-17:00 ThL2T7.3

Progressive damage and failure analysis for structural continuous fiber composites

Daniel VilyatserAnsysTim ArtzAnsysEric StamperAnsys

17:00-17:20 ThL2T7.4

Multifunction automated unit cell, review

Shay ShoamIsrael Aerospace IndustriesUri Ben-SimonIsrael Aerospace IndustriesYuval FreedIsrael Aerospace Industries

Zvi Karuchero IAI
Alexander Lukatsky Israel Aerospace Industries

Adam Sawday IAI

Eduardo Eigenberg Israel Aerospace Industries
Hilla Elimelech DDR&D



17:20-17:40	ThL2T7.5
Optimal design of thin-walled beams with buckling consideration	ıs
Ameer Marzok	Technion

17:40-18:00 ThL2T7.6

Effect of magnetic field on P- and S-waves in magneto-active polymers

Ankush Yadav Technion

Pavel Galich Technion



Session Halls at the Faculty of Aerospace Engineering

