



The Israel Society for Theoretical
and Applied Mechanics

The Israel Society for Theoretical & Applied Mechanics

Annual Symposium Program, 9/Dec/2018

- Location: Room 011, Engineering Studies (Kitot Handassa) building, Tel Aviv University
- The annual membership fee to ISTAM is 150 NIS. It includes the lunch at the symposium and can be paid during the registration.
- All lectures are open to the public free of charge. The program and abstract can be downloaded from <https://istam.net.technion.ac.il/>

OPENING SESSION

Time	Speaker	Subject
08:50 – 09:20		Registration and coffee
09:20 – 09:30	Prof. Gal deBotton	Opening statement & vote

MORNING SESSION | CHAIR GAL DEBOTTON

Time	Speaker	Subject
9:30 – 9:50	Prof. Reuven Segev, BGU	On the relation between continuum mechanics and electrodynamics
9:50 – 10:10	Prof. Kalman Schulgasser, BGU	Modelling the transverse shrinkage of wood
10:10 – 10:30	Prof. Sefi Givli, Technion	Solitary waves in a bistable lattice, Sefi Givli, and Shmuel Katz
10:30 – 10:50	Dr. Pavel Trapper, BGU	Configuration analysis of flexible pipelines and risers based on Euler's elastica
10:50 – 11:00		Coffee and snacks break
11:00 – 11:20	Dr. Ayelet Lesman, TAU	Long-ranged force transmission by stretch-induced anisotropy in fibrous biological networks, Yoni Koren, Shahar Goren, Xinpeng Xu, Ayelet Lesman
11:20 – 11:40	Dr. Oriel Shoshani, BGU	Anomalous transient dynamics of nano/micromechanical modes going through internal resonance
11:40 – 12:00	Dr. René Pernas-Salomón, Technion	Dynamic homogenization of composite and locally resonant flexural systems, René Pernas-Salomón and Gal Shmuel
12:00 – 12:20	Dr. Benny Bar-On, BGU	Stomatal micro-to-macro mechanics: The role of mechanical anisotropy on bio-mechanical function, Ziv Marom, Ilana Shtein and Benny Bar-On

LUNCH BREAK

Time	Speaker	Subject
12:20 – 13:00	Everybody	Catering near the lecture hall

AFTERNOON SESSION | CHAIR AMIR GAT

Time	Speaker	Subject
13:00 – 13:20	Dr. Andrei Zakharov, Technion	Geometry, mechanics and morphing of nematic elastomers, Andrei Zakharov and Len Pismen
13:20 – 13:40	Assist. Prof. Ofer Manor, Technion	Signatures of van der Waals and Electrostatic Forces in the Convective Deposition of Nanoparticle Assemblies from a Volatile Carrier Liquid, Ekhlal Homede, Anna Zigelman, Ludmila Abezgauz, and Ofer Manor
13:40 – 14:00	Prof. Alexander Yakhot, BGU	Near-wall turbulence in a pipe at $Re=2250$, Alexander Yakhot and Yuri Feldman
14:00 – 14:05	Coffee and snacks break	
14:05 – 14:25	Assist. Prof. Amir Gat, Technion	Control of Multiple Elastic Actuators by a Single Input Via Interaction Between Viscosity and Bi-Stability, Eran Ben-Haim, Lior Salem, Yizhar Or and Amir Gat
14:25 – 14:45	Dr. Avinoam Rabinovich, TAU	Analytical Model for Steady State Two-Phase Flow in Porous Media Under Gravity-Viscous Dominated Conditions,
14:45 – 15:05	Dr. Israel Greenfeld, Weizmann	Interfacial obstacles in fiber composites, Israel Greenfeld, XiaoMeng Sui and Daniel Wagner
15:05 – 15:12	Coffee and snacks break	

STUDENTS SESSION | CHAIR REUVEN SEGEV

Time	Speaker	Subject
15:12 – 15:24	Ron Ziv	Finite-amplitude simple and shock waves in rubber, Ron Ziv and Gal Shmuel
15:24 – 15:36	Bishara Dana	Modeling the thermo-electro-viscoelasticity in electro-active polymers, Bishara Dana and Jabareen Mahmood
15:36 – 15:48	Amit Dolev	Acoustically levitated sphere dynamics subjected to a parametric excitation, Amit Dolev and Izhak Bucher
15:48 – 16:00	Yoav Vered	Multi-mode dispersion estimation in coupled waveguides, Yoav Vered, Ran Gabai & Izhak Bucher
16:00 – 16:10	Coffee and snacks break	
16:10 – 16:22	Amihai Horesh	An Acousto-Gravitational Balance in Climbing Wetting Films, Amihai Horesh, Daniel Khaikin, Anna Zigelman, and Ofer Manor
16:22 – 16:34	Daniel Kovalev	3D flow field measurements in the wake of a tethered sphere undergoing VIV, Daniel Kovalev, Lior Eshbal and René van Hout

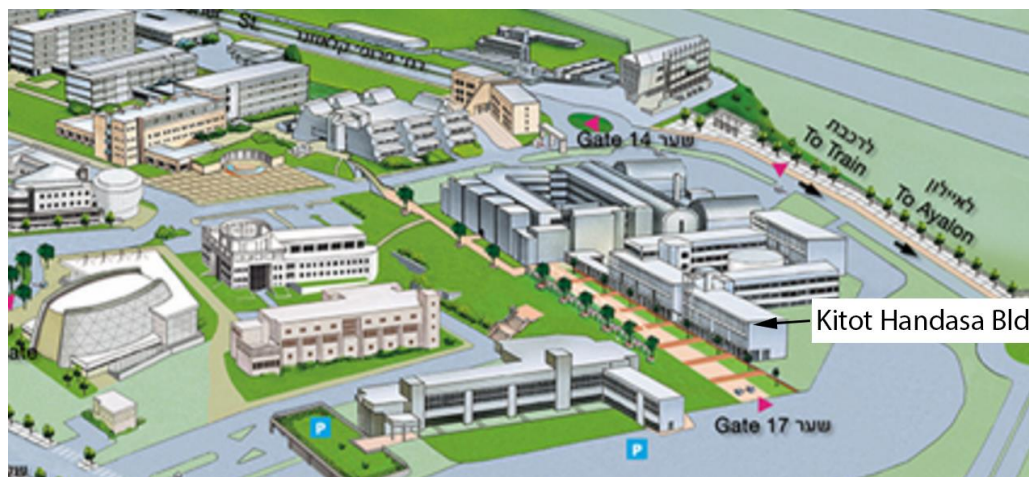
16:34 – 16:46	Ayala Gyllenberg	Lubricated Power-Law Gravity Currents, Ayala Gyllenberg, and Roiy Sayag
16:46 – 16:58	Baruch Rofman	Electro-Osmotic Flow over Superhydrophobic Surfaces, Baruch Rofman, Sebastian Dehe, Moran Bercovici and Steffen Hardt
16:58 – 17:10	Sofi Kuperman	Dynamics of Inertial, Rigid Fibers in Isotropic Turbulence, Kuperman, Sabban, and van Hout,
17:10 – 17:15	Reuven Segev	Citation of best student presentation. Summary.

Map and directions

The building is located next to Gate 17, see links to [map](#) and [building](#).

- Train: Station Tel Aviv University and enter via gate 14.
- Bus lines 274, 572, 271, 6, 7, 13, 25, 54, 127, 289
- Car: Parking lot #7, near Gate 17 of Tel Aviv University

Map (partial) of Tel Aviv University



Kitot Handasa building

