

Registration form

Name:
Affiliation:
Address:
E-mail:
Phone:
Supervisor (for students):

Registration rates

Regular:
early (until July 1, 2024) ILS 530
late (after July 1, 2024) ILS 590
Student (full-time graduate students only):
early (until July 1, 2024) ILS 280
late (after July 1, 2024) ILS 330

Method of payment

Wire transfer, bank requisites:
– beneficiary: איגוד ישראלי לבקרה אוטומטית
– bank: Leumi (10)
– branch: 705
– account: 13186472
Charge to institutional account
On-site payment (cash or checks only)

Filled registration forms are to be e-mailed to

mira.aran.iaac@gmail.com

with a proof of transfer, if applicable

טופס הרשמה

שם:
מקום עבודה:
כתובת:
דוא"ל:
טלפון:
מנחה (עבור סטודנטים):

דמי הרשמה

רישום מלא:
מוקדם (עד 1 ביולי 2024) ₪ 530
מאוחר (לאחר 1 ביולי 2024) ₪ 590
רישום סטודנט (סטו' לתארים מתקדמים בזמן מלא בלבד):
מוקדם (עד 1 ביולי 2024) ₪ 280
מאוחר (לאחר 1 ביולי 2024) ₪ 330

אמצעי תשלום

העברה בנקאית, פרטי הבנק:
– מוטב: איגוד ישראלי לבקרה אוטומטית
– בנק: לאומי (10)
– סניף: 705
– חשבון: 13186472
לחיוב תקציב מוסדי שמספרו
תשלום במקום (המחאה או מזומן בלבד)

את הטופס יש לשלוח לכתובת הדוא"ל

mira.aran.iaac@gmail.com

עם אישור העברה, אם רלוונטי

איב"א

איגוד ישראלי לבקרה אוטומטית

National Member Organization of IFAC and IAIN

Invitation to IAAC workshop

Navigation Systems and Applications

INWE24

to be held in **Daniel Hotel**, Herzliya
on Monday, July 8, 2024 (Tammuz 2, 5784)

Organizers: **Héctor Rotstein** (RAFAEL)
Vadim Indelman (Technion)
Itzik Klein (U Haifa)

We are grateful to the organizations below, whose support makes holding
IAAC events possible

— Applied Materials Israel Ltd. —
— Cielo Inertial Solutions Ltd. —
— Elbit Systems Ltd. —
— RAFAEL—Advanced Defense Systems Ltd. —

Foreword

פתח דבר

The Israel Navigation Systems and Applications Workshop and Exhibition is a biennial event organized and sponsored by the Israeli Association for Automatic Control (IAAC) to serve the wide audience of people in Israel interested in the navigation science and art. The one-day workshop is dedicated to technical talks that range from fundamental research, to applications, to field test results. The exhibition is a unique opportunity to bring together in one location the different industries and representatives offering navigation related hardware.

The Itzhack Bar-Itzhack Invited Speaker will be Prof. Mark Psiaki, Faculty Chair in the Kevin Crofton Department of Aerospace and Ocean Engineering, Virginia Tech. He is also a Professor Emeritus at the Sibley School of Mechanical & Aerospace Engineering, Cornell University.

During the workshop, we will hear talks on some of the hottest topics in navigation, including visual based navigation, GPS / GNSS receivers, and on new advances in sensor fabrication. Overall, the workshop offers a balanced and heterogeneous program with a nice mix of academic and industry speakers bringing us both theoretical and down-to-earth updates. As in previous editions, the event includes an exhibit in which the participants will have the chance to get to know the latest navigation products presented by manufacturers and their local agents.

Besides the technical objectives, the Workshop and Exhibition will provide a great opportunity for networking among all the participants that range from students pursuing an academic degree, researchers and users in Academy and Industry, and policy makers in this highly dynamic field.

We are looking forward to a very successful event.

Héctor Rotstein (RAFAEL) Workshop Organizers
Vadim Indelman (Technion)
Itzik Klein (U Haifa)

Program

תכנית

08:30–09:00	Registration and visit to the Exhibition
09:00–09:15	Opening
09:15–10:15	Itzhack Y. Bar-Itzhack Invited Talk: <i>The Search for Alternatives / Back-Ups to GPS</i> Mark Psiaki (Virginia Polytechnic Institute and State University)
10:15–10:35	<i>Incremental Nonparametric Inference in High Dimensional State Spaces</i> M. Shienman, O. Levy-Or, M. Kaess, and V. Indelman (Technion)
10:35–10:55	<i>Deep Learning for Deep Sea: Data-Driven Methods for Autonomous Underwater Vehicle Navigation</i> N. Cohen and I. Klein (U Haifa)
10:55–11:30	Coffee / tea break and visit to the Exhibition
11:30–11:50	<i>A Novel Mathematical Derivation of the Lock-in Effect for Coriolis Vibrating Gyroscopes</i> J. L. Guver (IAI–TAMAM)
11:50–12:10	<i>Electrostatically Actuated SOI In-Plane Motion Platform for In-situ Calibration of Micro Gyroscopes</i> E. Benjamin, R. Maimon, A. Kassie, E. Yichie, S. Krylov (RAFAEL and Tel Aviv U)
12:10–12:30	<i>High-fidelity Simulation and Emulation for High-end CRPA Testing</i> J. Martin (Spirent Federal Systems)
12:30–12:50	<i>Nuclear Magnetic Resonance Gyroscope (NMRG)</i> O. Scaly (RAFAEL)
12:50–14:20	Lunch break and visit to the Exhibition
14:20–14:40	<i>Quaternion Estimation from Two Vector Measurements With Error Analysis</i> D. Choukroun and C. Peng (BGU)
14:40–15:00	<i>Multi-Robot Communication-Aware Cooperative Belief Space Planning with Inconsistent Beliefs</i> T. Kundu, M. Rafaeli, and V. Indelman (Technion)
15:00–15:20	<i>Magnetic Navigation System Field Laboratory and Simulator Development</i> A. Sheinker, M. Maidanik, A. Yaniv, B. Ginzburg, and N. Salomonski (SOREQ NRC)
15:20–15:40	<i>Information-Aided Inertial Navigation</i> D. Engelsman and I. Klein (U Haifa)
15:40–16:00	Coffee / tea break and visit to the Exhibition
16:00–16:15	<i>CADS, GCPS—Utilizing Galaxy Smartphone</i> G. Kutz (Kearfott Corp.)
16:15–16:30	<i>SiPhOG: A Silicon Photonics Optical Gyro</i> A. Feshali (Annelo Photonics)
16:30–16:45	<i>Kearfott's Next-Generation Embedded GPS/INS System (NxNav)</i> C. Iaquinto and M. Litvin (Kearfott Corp.)
16:45–17:00	<i>Enabling Critical UAV Operations in a GPS-contested World</i> M. Kaplan (Infinidome)
17:00–17:15	<i>Navigation using simulated GNSS in underground mine environment</i> M. Magyar, J. Puputti, O. Kotavaara, J. Joutsenvaara, and E. Ariel (U of Oulu and Galileo Sat. Nav.)
17:15–17:20	Closing Remarks