Registration form

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

Registration rates

Regular:
- ○ early (until March 8, 2026) — ILS 530
- ○ late (after March 8, 2026) — ILS 590

Student (full-time graduate students only):
- ○ early (until March 8, 2026) — ILS 280
- ○ late (after March 8, 2026) — 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 8 במרץ 2026) — ₪530
- ○ מאוחר (לאחר 8 במרץ 2026) — ₪590

רישום סטודנט (סטו' לתארים מתקדמים בזמן מלא בלבד):
- ○ מוקדם (עד 8 במרץ 2026) — ₪280
- ○ מאוחר (לאחר 8 במרץ 2026) — ₪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

איגוד ישראלי לבקרה אוטומטית

National Member Organization of IFAC and IAIN

Invitation to IAAC workshop

Human-Centered Robotics and Control

to be held in **VERT Lagoon**, Netanya
on Monday, March 16, 2026 (Adar 27, 5786)

Organizers: **Nili Krausz** (Technion)
Ilana Nisky (BGU)

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

Human-centered robotics is at the intersection of control theory, machine learning, neuroscience, and biomechanics. As robotic systems increasingly operate in close physical and cognitive interaction with humans, there is a growing need to ground their design and control in principled models of human intent, movement, learning, and adaptation. This workshop aims to bring together researchers from diverse disciplines to explore how insights from human motor control, perception, and learning can inform modern robotics and control systems—and, conversely, how robotic systems can serve as experimental platforms for advancing our understanding of human sensorimotor behavior. The workshop spans a broad range of perspectives, including teleoperation, physical human–robot interaction, wearable and assistive robotics, and rehabilitation systems. While many of the presented works are motivated by applied domains such as prosthetics, exoskeletons, surgical robotics, and neurorehabilitation, the workshop also emphasizes foundational scientific questions. In particular, we highlight approaches that move beyond reactive control toward anticipation, coordination, and adaptation—key capabilities for effective human-centered robotic systems. The program is organized around three interconnected themes. The first session focuses on *inference of intent in human and artificial agents*, addressing how goals, waypoints, and motion plans can be inferred online from observed behavior under uncertainty. The second session centers on *coordination and optimization for physical human–robot interaction*, examining how learning, simulation, and control strategies can be leveraged to optimize embodied interaction in assistive systems such as prosthetic limbs and exoskeletons. The final session turns to *human-centered control and learning in neurorehabilitation*, exploring how adaptive and learning-based approaches can personalize robotic assistance and training over time.

Nili Krausz (Technion) Workshop Organizers
Ilana Nisky (BGU)

Program תכנית

08:30–09:00	Registration and light breakfast
09:00–09:10	Opening remarks
09:10–09:50	*Online Waypoint Recognition of Controlled Agents in Uncertain Environments* Jia Guo, Sushrut Surve, Zilong He, Silvia Ferrari (Cornell U), Sarah Keren (Technion)
09:50–10:30	*Multi-Modal Intention Recognition for Seamless Human–Robot Collaboration* Avishai Sintov (TAU)
10:30–11:10	*Constrained Intent Prediction: Predicting Trajectories Aligned with Human Movement Patterns* Ilana Nisky (BGU)
11:10–11:40	Coffee / tea break
11:40–12:40	Keynote Address *Rehabilitation Robotics: on Efficacy and Efficiency of Clinic-Based Technology and Transition to the Home* Hermano Krebs (MIT)
12:40–14:00	Lunch break
14:00–14:40	*A Coordination-Driven Approach to the Control of Powered Prosthetic Limbs* Nili Krausz (Technion)
14:40–15:20	*The Role of Computer Simulations in Exoskeleton Optimization* Raziel Riemer (BGU)
15:20–15:50	Coffee / tea break
15:50–16:30	*A Reinforcement Learning Approach to Personalized Rehabilitation* Anat Dahan (Braude)
16:30–17:10	*Submovement-Based Decomposition of Movements in Human Decision Making and Rehabilitation* Jason Friedman (TAU)
17:10	Closing remarks

speaker names are underlined

שמות המרצים מודגשים בקו