



## **ÇALIŞTAY DAVETİ**

*ODTÜ Elektrik-Elektronik Mühendisliği Bölümü lisansüstü öğrencilerine yönelik olarak bu yıl sekizincisi düzenlenen Lisansüstü Araştırma Çalıştayı GRADSTAR 2025, ekte sunulan programla gerçekleştirilecektir. Etkinliğin kapanışında başarılı araştırmacıların ödüllendirileceği bir ödül töreni yapılacaktır.*

*Çalıştayı ve ödül törenini onurlandırmanızı diler, saygılar sunarız.*

*EEMB*

**Tarih:** 14 Mart 2025, Cuma

**Saat:** 9.30 – 17:30

**Yer:** ODTÜ Elektrik ve Elektronik Müh. Böl.

*Sevim Tan Amfisi / Ayaslı Araştırma Merkezi*



## GRADSTAR 2025 Programı – 14 Mart 2025, Cuma

**9.30 – 10.00 Açılış Töreni (Sevim Tan Amfisi)**

**10.00 – 13.00 Poster Oturumu (Ayaslı Research Center)**

**13.00 – 15.10 Sözlü Oturum I (Sevim Tan Amfisi)**

**13.30-13.50 Özgür Gülsuna** “Design and Analysis of a GaN-Based Megahertz Integrated Motor Drive for a PCB Motor”

Authors: Ozgur Gulsuna, Furkan Tokgoz, Furkan Karakaya, Ozan Keysan

**13.50-14.10 Ogün Altun** “Narrowband and Wideband Dual-Mode Wireless Power Transfer System With a Single Transmitter”

Authors: Enes Ayaz, Ogün Altun, Özgür Gülsuna, Ozan Keysan

**14.10-14.30 Kemal Parlaktuna** “WLAV state estimation based topology error detection and identification in distribution networks with limited number of measurements”

Authors: Kemal Parlaktuna, Erk Dursun, Murat Göl

**14.30-14.50 Arash Mohammadi Vaniar** “A battery degradation-aware energy management system for agricultural microgrids”

Authors: Vahid Safavi, Arash Mohammadi Vaniar, Najmeh Bazmohammadi, Juan C. Vasquez, Ozan Keysan, Josep M. Guerrero

**14.50-15.10 Atakan Durmaz** “Feedback motion planning via sequential composition of random elliptical funnels”

Authors: Atakan Durmaz, Oğuz Özdemir, Mustafa Mert Ankaralı

**15.10 – 15.40 Kahve Arası**

**15.40 – 17.00 Sözlü Oturum II (Sevim Tan Amfisi)**

**15.40-16.00 Hakan Özen** “Interference and Beam Squint Aware TTD-Aided Beamforming for Dual Wideband Massive MIMO”

Authors: Hakan Özen, Gökhan Muzaffer Güvensen

**16.00-16.20 Hakan Özen** “Beam-Squint-Aware Channel Estimation for Dual-Wideband UPA-Type RIS-Aided Massive MIMO”

Authors: Hakan Özen, Onur Yılmaz, Gökhan Muzaffer Güvensen

**16.20-16.40 Doğukan Özbayrak** “Eliminating Media Noise While Preserving Storage Capacity: Reconfigurable Constrained Codes for Two-Dimensional Magnetic Recording”

Authors: Iven Guzel, Doğukan Özbayrak, Robert Calderbank, Ahmed Hareedy

**16.40-17.00 Özgür Eriş** “Design, simulation, and measurement of near-zero-index shells for electromagnetic beam generation”

Authors: Özgür Eriş, Özgür Ergül

**17.00 – 17.30 Kapanış ve Ödül Töreni (Sevim Tan Amfisi)**



## Posterler

- P1 - Anıl ARSLAN “Comparative Analysis of Multi-static and Monostatic Radar Networks”
- P2 - Enes Kaya “Reinforcement Learning Based Rate Splitting for Minimizing AoI in Finite Blocklength Systems”
- P3 - Baran Kırdar “A Multi-target Parameter Estimation Method for MIMO System with OFDM Waveform”
- P4 - Deniz Cenk Temel “MEMS-Based Multimodal System With Temperature, Pressure, and Oxygen Concentration Sensors for Intracranial Measurements”
- P5- Muzaffer Temelli “Sensor Processing and Controller Design for Trajectory Tracking of Autonomous Vehicles”
- P6 - Atakan Durmaz “Simulation and Control of an Unmanned Lunar Rover at the Moon’s South Pole: Leveraging Challenging Illumination Conditions for Enhanced Exploration”
- P7 - Osman Kaan Karagoz “Predictive uncertainty in state-estimation drives active sensing”
- P8 - Mustafa Akbaba “An Optimization-Driven Foot Placement Controller for Quadruped Landing”
- P9 - Arash Mohammadi Vaniar “Two-Stage Distribution Network Reconfiguration Considering Shunt Compensation”
- P10 - Fatih Erden “Data Driven Condition Monitoring on Water Conduit Systems of Hydro Power Plants”
- P11 - Tuğrul Nizamioğlu “Two-Layer Model Predictive Control of Microgrids: Cost Optimization and Resilience Through Adaptive Setpoint Coordination”
- P12 - Mohammad Hossein Mokhtare “Design and Control of an Agricultural Microgrid for Grid-Connected and Off-Grid Applications”
- P13 - Işık Emir Altunkol “Design and Validation of a Low-Speed PCB Motor for Agricultural Steering Applications”
- P14 - Yusuf Basri Yılmaz “Design and Optimization of Dual-speed Synchronous Reluctance Motor”
- P15 - İsmail Macit “Testing of a Compact DC/DC Converter for Electric Vehicles with GaN High Electron Mobility Transistors (HEMTs)”
- P16 - Mehmet Emre Eralp “Analysis and Design of 3D Printed Dielectric Scattering Surface”
- P17 - Ramazan Cem Çıtak “Simulation of Radar Echo Signal with Different Statistical Models for a Radar Altimeter”
- P18 - Eda Özkaynar “Prediction of Left Ventricular Ejection Fraction From 2D Echocardiography”
- P19 - Alp GÜRSOY “Deep Learning-Based Reconstruction of Covariance Matrices for Direction of Arrival Estimation in Coherent and Non-Coherent Signal Contexts”
- P20 - Canberk Almus “A Data-Driven MARS Approach for PVC Localization Using Clinical Data”
- P21 - Yunus Emre Tüysüz “Classification of ECG Beats Using a Hybrid Transformer-CNN Model”
- P22 - Melis Gökşen “Reconfigurable Cactus Antenna for ISM Bands”