IEEE

IEEE POWER ELECTRONICS SOCIETY
Powering a Sustainable Future

SLED 2027

INTERNATIONAL SYMPOSIUM ON
SENSORLESS CONTROL FOR ELECTRICAL DRIVES
MODENA • ITALY



CALL FOR PAPERS

COMPLESSO DI SAN GEMINIANO

8–10 SEPTEMBER 2027

Department of Law • Via San Geminiano 3 • Modena, Italy

Conference website and author information

Advancing the Next Generation of Sensorless Drives

Join leading researchers, engineers and industry experts to shape the next generation of intelligent, reliable and sustainable electric drives through keynotes, technical sessions, networking and technical visits.

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IMPORTANT DATES

15 JAN 2027	Digest submission opens	**15 MAR 2027**	Digest submission deadline
02 MAY 2027	Notification of acceptance	**30 JUL 2027**	Final manuscript deadline

https://www.ieee-sled2027.org
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Topics of interest

include, but are not limited to:

Sensorless Control Methods and Position Estimation Techniques

- Saliency-based sensorless techniques
- Model-based sensorless control
- Advanced full-speed sensorless control strategies
- Combined position and parameter estimation techniques
- AI, data-driven and learning-based sensorless drives

Applications and Future Perspectives

- Sensorless drives for transportation, aerospace and marine systems
- Sensorless drives for industrial, robotic and appliance applications
- Sensorless drives for energy and power generation systems
- Emerging applications and future perspectives of sensorless control

Power Converters and Energy Storage with Minimal-Sensing Drives

- Converter-integrated and reduced-sensor drive systems
- Implementation issues in sensorless drives (e.g., power converter nonlinearities, EMI and acoustic-noise)
- Reduced-sensor operation (e.g., single-shunt or low-resolution measurements)
- Interaction between sensorless drives and energy-storage systems
- Estimation of principal metrics of energy storage units for electric propulsion systems

Design techniques enhancing sensorless operation

- Sensorless-oriented design of electrical machines, power converters and drive systems
- Sensorless drives for reliability, diagnostics and resilient operation
- Hybrid sensor-assisted and sensorless control techniques
- Converter thermal and health-state estimation enhancing sensorless controllability

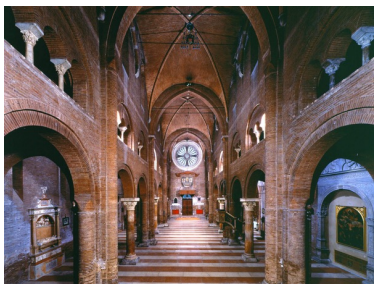
Digest Submission Guidelines

Submit a 3–5 page, single-column technical digest in 10-point font. The digest must include title, abstract, technical content and references, clearly presenting the work's originality, methodology and main results of the proposed work. The digest must be submitted as a PDF with all fonts embedded. Cropped versions of full papers will not be accepted.

All Accepted and presented regular papers that meet IEEE publication requirements will be submitted for inclusion in IEEE Xplore.







MODENA: MOTOR VALLEY • UNESCO HERITAGE • ITALIAN EXCELLENCE

Central and South Jt. Chapter - Italy Section

North Jt. Chapter - Italy Section

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