

IEEE AP-S DL Workshop – Perugia Edition

Topic: Key Innovations in Metasurfaces, Electromagnetic Modeling, and Additive Manufacturing

Date: February 2, 2026

Location: Aula Magna, Department of Engineering, University of Perugia, Italy

Hybrid Attendance: 20 participants in-person | 10 participants via Microsoft Teams and YouTube Live

Audience Profile: Undergraduate, Master's, and Ph.D. students, Academic Researchers, and Industry Professionals.



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Executive Summary

On February 2, 2026, the University of Perugia hosted a high-level technical workshop as part of the **IEEE AP-S Italian Workshop Series**. This national tour was an initiative organized and coordinated globally by **Prof. Levent Sevgi**, the **IEEE AP-S Distinguished Lecturer Program Chair**. The specific organization and coordination of the stage in **Perugia** was managed by the **IEEE Italy Section Joint Chapter (AP03/MTT17 C&S)**, led by the Chapter Chair, Prof. Cristiano Tomassoni, in close cooperation with the local organizer **Prof. Paolo Mezzanotte**, an expert in electromagnetics at the University of Perugia.

The event, held in the **Aula Magna of the Department of Engineering**, was opened by the **Director of the Department**, who welcomed the international speakers and participants, emphasizing the importance of such global collaborations for the department's research and international standing. To ensure maximum reach, the workshop was broadcast via **Microsoft Teams** and **YouTube Live**. The full recording is available at the following link: <https://www.youtube.com/watch?v=HgkWYU7b2bM>.

Scientific Program

The full-day seminar featured four internationally renowned **IEEE AP-S Distinguished Lecturers** and a specialized local contribution:

- **Metasurfaces and Information Encoding:** **Prof. Okan Yurduseven** (Queen's University Belfast, UK) presented a journey from advanced imaging systems to information encoding, demonstrating how metasurfaces are evolving into active components for high-speed communication architectures.
- **Transformation Electromagnetics:** **Prof. Özlem Özgün** (Hacettepe University, TR) explored the "Magic World" of transformation electromagnetics, detailing the mathematical frameworks used to design invisibility cloaks and non-conventional electromagnetic devices.
- **Non-Hermitian Electromagnetics:** **Prof. Pai-Yen Chen** (University of Illinois, Chicago, US) discussed non-Hermitian systems, highlighting their emerging applications in novel sensors and non-reciprocal devices with unprecedented sensitivity.
- **Electromagnetic Engineering Education:** **Prof. Levent Sevgi** (Istanbul Technical University, TR) provided a critical look at the pedagogical shift toward

"Electromagnetic Engineering," sharing his vision for training the next generation of engineers to meet modern multi-disciplinary challenges.

- **Local Expert Contribution:** The technical program was complemented by **Prof. Cristiano Tomassoni** (University of Perugia), a Distinguished Lecturer of the IEEE-MTT Society, although he contributed to this specific AP-S event solely in his capacity as a local expert. His talk focused on **Additive Manufacturing for Microwave Components**, exploring how 3D printing provides new degrees of freedom for the fabrication of high-performance passive components.



Picture 1: Photos of the five speakers and group photo of the speakers with the local organizer Prof. Mezzanotte.

Networking and Academic Impact

To facilitate the exchange of ideas, a **buffet lunch** was offered to all speakers and participants during the midday break. This social gathering, organized by the Chapter and the local committee, was a vital moment for **networking**. It allowed students from undergraduate to Ph.D. levels to engage in informal, one-on-one discussions with the visiting Distinguished Lecturers. Industry professionals and academic researchers also utilized this time to discuss practical R&D challenges with the visiting experts.

Furthermore, the workshop provided significant academic value: **certificates of attendance** were given to all participants. For **Ph.D. students**, these certificates were particularly relevant, as they allowed them to earn the **educational credits (CFUs)** required by their doctoral programs.

The networking activities continued into the evening with a **convivial dinner** in the historic center of Perugia at "**Osteria a Priori**", a typical local tavern. Over a selection of traditional Umbrian dishes, the speakers and organizers further strengthened their professional bonds. This informal setting proved highly productive, as it fostered discussions regarding the **establishment of official agreements (conventions) between the participating universities**, paving the way for future student exchanges and joint research initiatives.



Picture 2: A group photo after the workshop.



Picture 3: A selection of photos and selfies from the workshops.

Conclusion

The Perugia edition of the tour was a significant success, highlighting the synergy between the IEEE APs Distinguished Lecturer program and the Italian academic community. By combining world-class technical speeches with institutional support, formal educational recognition, and strategic networking, the workshop provided a high-value experience for students and seasoned professionals alike.