



EMPOWER6G

Newsletter Issue 3

Marie Skłodowska-Curie Actions (MSCA)
Insights and Innovations in 6G Research and Development

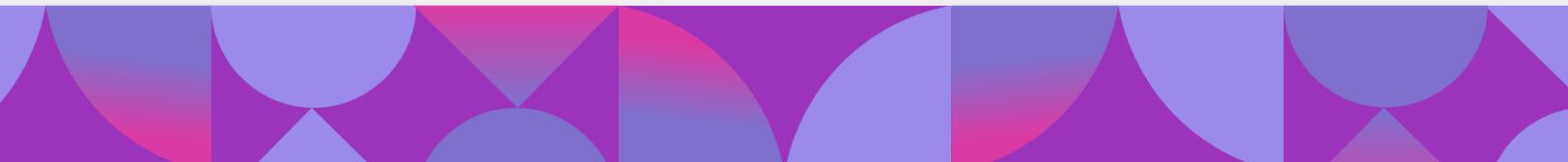
EMPOWER-6G Team

March 15, 2026



THIS PROJECT HAS RECEIVED FUNDING FROM THE
EUROPEAN UNION'S HORIZON 2022 RESEARCH AND
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NO 101120332

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Reza Ghasemi Alavicheh presents innovative research for Physical Layer Security.

1–4 September, 2025

IEEE PIMRC 2025
Istanbul, Turkey



- Introducing Z3RO, a distortion-aware precoding strategy that leverages the inherent nonlinearities of power amplifiers—traditionally considered impairments—to enable security.
- Rather than injecting artificial noise orthogonal to the legitimate channel, Z3RO suppresses PA distortion at the intended user while spatially steering it toward potential eavesdroppers.
- Z3RO achieves a secrecy rate up to 2.5 times higher compared to MRT.



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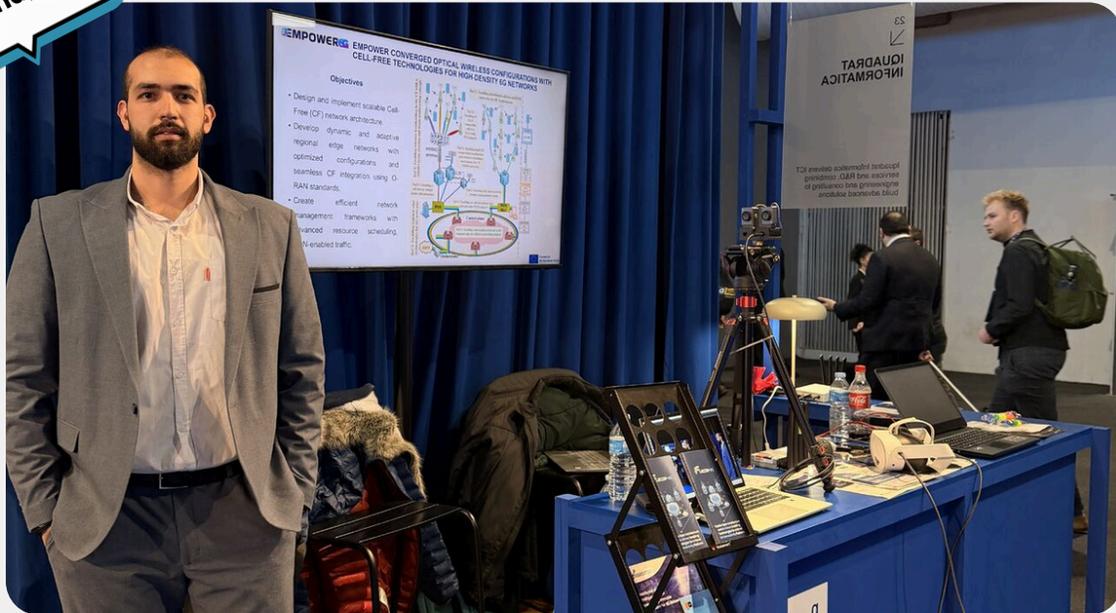
Ms. Melani Gurdziel pm@iquadrat.com

Prof. Christos Verikoukis cveri@isi.gr

EMPOWER6G Iquadrat's booth at Integrated Systems Europe (ISE) 2026 in Barcelona, Spain.

3-6 February, 2026

ISE 2026
Barcelona, Spain



- At the exhibition, EMPOWER-6G was showcased by Mohammadreza Dibaj at Iquadrat's booth, located in the Govern de Catalunya Pavilion (CS100), booth 23, at Fira Barcelona.
- The event provided an excellent platform to present the project's vision and early progress in advancing explainable automation for future 6G infrastructures.



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EMPOWER6G at Patras IQ Innovation & Technology Transfer Expo, held in Patras, Greece.

27-28 Feb & 1 March, 2026

PatrasIQ 2026
Patras, Greece



- Our DC from ISI Athena, Mohammad Eskandarinia, welcomed visitors at the ISI booth and presented the latest updates and insights from the EMPOWER6G project.



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EMPOWER6G inspiring the Next Generation through 6G Research.

12 March, 2026



- Mohammad Eskandarinia, DC from ISI Athena, had the pleasure of welcoming first-year middle school students from Corinth to the CEID—Computer Engineering and Informatics Department.
- The visit was organized by the SMARTTECH ATHENA / ISI research team with the goal of bringing young students closer to the world of research, innovation, and next-generation technologies.



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Recent Publications

1. **"Energy-Efficient and User-Centric AP Clustering in Cell-free Massive MIMO Networks"**, David Miguel Franco Rodrigues, Georgios Kontos, Prodromos Makris, Emmanouel Varvarigos, IEEE CSCN 2025. - [View](#)
2. **"GNN-based Precoder Design and Fine-tuning for Cell-free Massive MIMO with Real-world CSI "**, Tianzheng Miao, Thomas Feys, Gilles Callebaut, Jarne Van Mulders, Emanuele Peschiera, Md Arifur Rahman, François Rottenberg, 45th WIC Symposium on Information Theory and Signal Processing in the Benelux (SITB 2025). - [View](#)
3. **"Hybrid FSO–THz Technologies for 6G Access Networks: A Cost-Availability Trade-off Analysis"** Sai Vikranth Pendem, Carlos Natalino, Antonio Napoli, Paolo Monti. ICTON, March 2025. - [View](#)
4. **"Leveraging Power Amplifier Distortion for Physical Layer Security"** Reza Ghasemi Alavicheh · Thomas Feys · Md Arifur Rahman · François Rottenberg, PIMRC, September 2025. - [View](#)



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Recent Publications

5. **"Impact of Subcarrier-Routing Devices on the Performance of DSCM Coherent Systems Evaluated with Analytical Models"**, Albert Otero Casado, Pablo Torres Ferrera, Christos Christofidis, Giuseppe Parisi, Dan Marom, Ioannis Tomkos, Paolo Monti, Antonio Napoli, ONDM, May 2025. - [View](#)



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