



Institut  
Ruđer  
Bošković



Italian Research Day in the World  
16th April 2026

Faculty of Electrical Engineering and Computing of the University of Zagreb  
(Grey Hall/Siva vijećnica)  
Vukovarska 39, Zagreb



Artificial Intelligence Beyond the Hype: Limits, Innovations and Perspectives

**10:00 Welcome remarks**

- Prof. Vedran Bilas, *Dean of the Faculty of Electrical Engineering and Computing, University of Zagreb*
- H.E. Paolo Trichilo, *Ambassador of Italy to the Republic of Croatia*
- TBC *Ministry of Science, Education and Youth of the Republic of Croatia*
- TBC *Ruđer Bošković Institute*

**10.20 Keynote lecture** by Dr. Linda Ottoboni, *Department of Pathophysiology and Transplantation of the University of Milan*

**10:40 First Round-Table Discussion:** Beyond the Hype: Neural Networks, Their Limits, and the Future of AI

- Prof. Sven Lončarić, *Director of the Centre for Artificial Intelligence of the Faculty of Electrical Engineering and Computing, University of Zagreb*
- Ms. Luisa Spairani, *CEO and Head of Innovation at Net Surfing s.r.l., Ivrea, Italy*
- Mr. Ervin Jagatić, *AI Business Unit Director at Infobip*
- Ms. Andrea Čović Vidović, *Deputy Head of Representation in Croatia of the European Commission*

The first round-table is devoted to the current state of artificial intelligence, with particular emphasis on technologies that are effectively deployed today in industry, services, critical infrastructures and public policy. The discussion will focus primarily on neural-network-based approaches, which constitute the core of most commercial and institutional AI applications, and will examine their concrete value for both the productive sector and society at large. Drawing on the experience of industry representatives, applied research centers, policy makers, and regulatory bodies, the panel will address how AI is currently used in key sectors such as finance, insurance, telecommunications, advanced manufacturing, cybersecurity and public services. Special attention will be given to the Italian contribution in these areas, highlighting both the role of major industrial players and technology-intensive companies, and the impact of Italian applied research in enabling technology transfer and the implementation of reliable and scalable AI solutions. Alongside economic and social opportunities, the round table will directly address the risks associated with the widespread adoption of AI technologies, including system robustness and security, error management

and so-called “hallucinations”, data protection, labor-market implications, energy consumption, and environmental sustainability. In this context, the discussion will also consider the role of public policy, European regulation, and industrial best practices in ensuring that AI development remains competitive, responsible and aligned with European values. The overall goal is to provide a realistic and evidence-based picture of AI “as it is today,” fostering dialogue between science, industry, and policy and illustrating how Italy actively contributes to the ongoing digital transformation through scientific expertise, industrial capacity and regulatory vision.

## 11:35 Q&A

### 11:40 **Second Round-Table Discussion:** Innovating Artificial Intelligence: Mathematical Models, Architectures, and New Paradigms

- Dr. Linda Ottoboni, *Department of Pathophysiology and Transplantation of the University of Milan*
- Dr. Vinko Zlatić, *Head of the Theoretical Physics Division and Condensed Matter and Statistical Physics Group at the Ruđer Bošković Institute*
- Dr. Federica Gerace, *Department of Mathematics of the University of Bologna*
- Mr. Marko Horvat, *Head of the Operations Sector at Generali osiguranje d.d.*

The second round-table looks toward the future of artificial intelligence, focusing on advanced research directions aimed at overcoming the structural limitations of current dominant approaches. The discussion will center on emerging theoretical and computational paradigms—including neuro-symbolic AI, multi-agent systems, federated learning, neuromorphic architectures, high-performance computing, and quantum computing—that are being actively developed in research laboratories and large-scale computing infrastructures. Within this framework, particular emphasis will be placed on the contribution of Italian research, which is internationally recognized for the strength of its mathematical, theoretical, and computational foundations, as well as for its long-standing tradition of excellence in physics, theoretical computer science, and complex systems engineering. These capabilities represent a strategic asset for the development of next-generation AI solutions that are more interpretable, robust, energy-efficient, and less dependent on massive datasets.

The panel will discuss how these approaches, while not yet fully mature from an industrial standpoint, offer a concrete opportunity for Italy and Europe to assume a leading role in shaping future AI trajectories, rather than merely competing within technological paradigms already dominated by other global players. The role of large-scale computing infrastructures, European collaborations, and international organizations will also be examined as key enablers of coordinated and strategic growth in these emerging fields. This round table aims to foster a high-level scientific and strategic reflection on how methodological and conceptual innovation can strengthen European competitiveness and enhance Italy’s contribution to the development of the artificial intelligence of tomorrow.

## 12:35 Q&A

### 12:40 **Networking lunch** offered by the Embassy of Italy in Zagreb

Moderator of the round table discussions: Dr. Fabio Franchini, *Ruđer Bošković Institute*

*The event will be in English language without translation.*