

Various Innovative Technological Experiences (VITE II)

Transforming Science and Society with XR, AI, and Creative Communication

April 15-19 2024, Monte Porzio Catone (Roma)

Scientific Organizing Committee

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Foreword

After less than 16 months since the first edition (Palermo, November 28 - December 2, 2022), the second edition of the VITE conference took place at the INAF Monte Porzio Catone Astronomical Observatory from April 15-19, 2024. VITE II was organized by INAF - Astronomical Observatories of Rome and Palermo, and by INFN - National Laboratories of Frascati. These institutions collaborated to bring together for a second time leading research institutions, universities, schools, public and private organizations, and companies, all eager to engage in discussions on the use of new technologies in communication and aiming to foster scientific exchange, share the latest developments, and discuss future advancements. The focus was on how these technologies can be applied across a wide range of contexts, spanning from education and science communication, to the enhancement of cultural heritage, to regional development, to the visualization and presentation of scientific data, and to fostering inclusion. Among the topics covered during the conference were artificial intelligence, virtual and augmented reality, holography, educational robotics, and the various applications of these technologies. Presenters showcased the latest and most advanced tools currently available in these fields, providing participants with an up-to-date perspective on the cutting edge of technological innovation. In addition, several research laboratories and facilities in Italy, where these fields are being actively studied, were introduced, offering valuable insights into ongoing research and its potential applications.

In line with the conference's interactive spirit, attendees had the chance to experience some of the very technologies being discussed. Dedicated spaces were set up for participants to immerse themselves in virtual and augmented reality products, exploring firsthand the capabilities and potential of these innovations.

A particularly engaging session took place inside the Holostage in the observatory, where some participants had the opportunity to present their 3D animations in a truly spectacular and immersive environment, pushing the boundaries of how research can be presented.

As part of the event's agenda, the VisitLab of the High-Performance Computing Department of CINECA led a workshop focused on scientific visualization and storytelling, offering attendees the chance to deepen their understanding of how to effectively communicate complex scientific data through visual means.

The event served as a platform for networking, collaboration, and the presentation of ground-breaking research, reflecting the commitment of both INAF and INFN to promoting scientific innovation and interdisciplinary cooperation.

A key milestone of VITE II was the unveiling of the official conference logo, a new addition from the 2024 edition onward. Designed by Laura Leonardi and Riccardo Leoni from INAF, the logo is a visual representation of the technologies and themes discussed at the event. It encapsulates the conference's dual focus on both technological advancement and human interaction. The logo's design incorporates a series of graphic elements that symbolize the interaction between technology and humanity. The visual composition includes:

- Geometric shapes that allude to the digital world, as well as the three-dimensional nature
 of virtual and augmented reality, with a headset and a mobile device (tablet or smartphone)
 placed above;
- A stylized robot icon, which emphasizes the role of coding and programming in these technological domains;

Connecting lines, which evoke the internet network, the global connectivity, and the concept
of the metaverse.

The design process was guided by the key principles of logo creation: simplicity, versatility, and memorability. These principles resulted in a logo that is both accessible and engaging, effectively representing the spirit of the VITE conferences. The fonts chosen for the logo are Octopus Game and Impact, while the official color palette consists of purple (#73046b), blue (#070459), and white (#fffff).

Looking ahead, the 2025 edition of the "Various Innovative Technological Experiences" (VITE III) conference is scheduled to take place from November 10-14, 2025, in Matera, at the Sparkme Space Academy Science Museum. This future event promises to continue fostering meaningful dialogues about the intersection of technology, science, and society.