

## **ETRIA World Conference TRIZ Future 2021 - Bolzano, Italy**

*Creative Solutions for a Sustainable Development*

**22-24 September 2021, Free University of Bozen-Bolzano [ <https://www.unibz.it/> ]**

### **Overview**

The ETRIA World Conference “TRIZ Future” 2021 “Creative solutions for a sustainable development” will take place at the Free University of Bozen-Bolzano (Bolzano, Italy) and online on 22-24 September 2021. Bolzano is the main town of the alpine region of South Tyrol, and is considered the door to Dolomites, included in the UNESCO list of the world's protected natural paradises since 2009.

The Conference is organized by The European TRIZ Association (ETRIA) together with the Free University of Bozen-Bolzano. The conference's main sponsor is the International Federation for Information Processing (IFIP).

The Conference aims at linking industrial companies, research centers, educational organizations and individuals to share their experience on systematic innovation and promote TRIZ-based tools worldwide. It will provide an international forum for exchanging new ideas on knowledge-based innovation, presenting recent achievements in this area and strengthening collaboration between academic and industrial players.

The 21st edition of ETRIA World Conference “TRIZ Future” invites original papers and best practices that combine systematic invention generation, creative design, and digital technologies to solve complex problems in any field of human activity with a particular focus on advanced systems for tackling environmental issues and other global challenges. Therefore, the conference welcomes scientific and practitioners’ contributions about the main issues summarized in the following, which however should not be considered exhaustive.

### Topics for the call for papers

#### *Innovation-oriented developments in artificial Intelligence and digitalization*

- Artificial intelligence and systematic innovation
- Knowledge-based innovation
- Digitalization in systematic innovation
- Development of advanced engineering systems and innovative products exploiting artificial intelligence and digitalization
- Creative and problem-solving tools addressing problems in the world 4.0
- Digital TRIZ

*Progress in innovation for the sustainable development and the green deal*

- Environmental issues and systematic innovation
- Inventive and creative design for sustainability
- Fundamental engineering advances in the fields of energy and sustainability
- Methodological advances to make people's behavior more sustainable
- Eco-TRIZ and TRIZ-based eco-design
- TRIZ in Design for Additive Manufacturing to minimize material consumption

*TRIZ, inventive design, problem solving and Intellectual Property*

- Advances and recent developments in TRIZ theory, tools and models
- Science of inventive problem solving, systematic invention and conflict resolution
- Advanced tools for complex problem solving
- TRIZ and related tools in design thinking and open innovation
- Development of inventive design methods and theories
- Use of TRIZ heuristics and solutions to push creative design
- Novel approaches in patent valuation, technology transfer and Intellectual Property management
- Design for patentability
- TRIZ and System Engineering

*TRIZ in academia, industry, education and society*

- TRIZ for science and fundamental research (e.g. physics, chemistry, other natural sciences) to tackle breakthrough innovations
- TRIZ for X: engineering applications of TRIZ and systematic innovation tools in the X-field, e.g. robotics, smart connected products, telecommunications, civil engineering, electro-mechanics, electronics, software, renewable energy, mobility and transportation

- TRIZ in medicine, pharmacy, biotechnology
- TRIZ for the health services and well-being
- TRIZ in process engineering
- TRIZ in management, economics, strategy, politics, business and entrepreneurship
- TRIZ in social sciences and non-technical disciplines
- Other areas where systematic innovation is present and were not explicitly mentioned
- TRIZ and disruptive innovation
- TRIZ and forecasting of technical systems
- TRIZ application in industry
- Industrial case studies where TRIZ and systematic innovation methods are used
- Education in the fields of TRIZ and creative design
- TRIZ to push digital education
- TRIZ training in schools, companies and other organizations
- TRIZ diffusion and promotion
- TRIZ communities and communities using TRIZ

### **Dates and dealines**

- Submission of Abstract: 31 January 2021
- Abstract review: 21 February 2021
- First submission of full-papers: 31 March 2021
- Paper Review: 31 May 2021
- Final submission deadline: 30 June 2021
- Registration: 15 July 2021
- Conference 22-24 September 2021

### **Committees**

*General Chair*

Dr. Yuri Borgianni, Free University of Bozen-Bolzano

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*Scientific Chair*

Prof. Stelian Brad, Cluj IT Cluster, Technical University of Cluj-Napoca, Romania

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Prof. Denis Cavallucci, ICube, INSA Strasbourg, France

Prof. Pavel Livotov, PPI, Offenburg University, Germany

*Program committee*

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Prof. Federico Rotini, University of Florence, Italy

Prof. Davide Russo, University of Bergamo, Italy

*Organizing committee*

Renate Folie, Free University of Bozen-Bolzano, Event Office

Dr. Aurora Berni, Free University of Bozen-Bolzano

Dr. Franco Concli, Free University of Bozen-Bolzano

Prof. Guido Orzes, Free University of Bozen-Bolzano

Dr. Erwin Rauch, Free University of Bozen-Bolzano

Dr. Lorenzo Fiorineschi, University of Florence, Italy

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