Center of Applied Mathematics
Faculty of Mechanical Engineering,
University of Niš, Serbia

CAM-FMEN

Within the conference series "CONSTRUCTIVE MATHEMATICS as a BRIDGE BETWEEN CLASSICAL MATHEMATICS, MATHEMATICAL EDUCATION, PHILOSOPHY OF MATHEMATICS and COMPUTER SCIENCES - AN APPEALING INTELECTUAL UNIFICATION" we are pleased to announce the second edition of the series, entitled

Constructive Mathematics: Foundation and Practice

CM:FP 2023, June 26-30

IN MEMORY OF **Errett Bishop** (1928-1983):
CELEBRATING THE 95th ANNIVERSARY of his birth as well as
the 55th anniversary of the publication of his seminal book
Foundations of Constructive Analysis (FCA)

WELCOME

**Conference is supported by
Ministry of Science,
Technological Development
and Innovation
of the Republic of Serbia**

http://cmfp2023.masfak.ni.ac.rs/

Constructive Mathematics: Foundations and Practice

CM:FP 2023

June 26 -30, 2023

Stanford's computer science pioneer Donald Knuth (*Algorithmic Thinking and Mathematical Thinking)* proposed that computer science be known as "algorithmics". He shows in great detail how a constructive mathematician can understand the triad

(***Assumption Proof Conclusion***)

in terms of

(***Input data Algorithm Output data***).

Knuth was suggesting that constructive mathematics could serve as a bridge between classical mathematics and computer science, an appealing intellectual unification.

There will be two sections (or streams) at the conference:

- **SECTION I** on **Constructive Mathematics and Computer Science**,
- **SECTION II** about **Challenges for Mathematics Education in the Emerging Brave New World.**

http://cmfp2023.masfak.ni.ac.rs/

SECTION II

The challenges for mathematics education

in the emerging Brave New World

Section's organizers:

Alexandre V. Borovik, University of Manchester

Karly Kehoe, Canada Research Chair in Atlantic Canada Communities

Mahouton Norbert Hounkonnou, University of Abomey-Calavi

Melanija Mitrović, University of Niš

Artificial intelligence (AI) is one of the world's most discussed technology trends and is forecast to increase global GDP by $15.7 trillion by 2030.

What should mathematics education be like in the era of AI?

What kind of mathematics should be taught to

(a) future developers, controllers, masters of AI?

(b) the general public, the users (and perhaps victims) of AI?

http://cmfp2023.masfak.ni.ac.rs/SectionII.html

CAM-FMEN

http://camfmen.masfak.ni.ac.rs

CAM-FMEN was established at the very beginning of the 21st century (4 May 2004). Its members are highly motivated to contribute to the development of mathematical sciences and their application at the University of Niš in general, at the Faculty of Mechanical Engineering in particular. An international interdisciplinary research group, formed around **CAM-FMEN**, contributes to investigating applications of mathematical knowledge to problems in engineering sciences, life sciences, humanities and arts.

Apart from professors and teaching assistants **CAM-FMEN,** activities are also performed by students, young researchers, and external partners. We are lecturers, a careful audience, and active participants at the same time. **CAM-FMEN** members have presented their research results at renowned foreign universities, international conferences and workshops. Distinguished lecturers from other faculties of the University of Niš, universities and scientific institutions from the country and abroad give lectures at **CAM-FMEN** seminars and conferences.

Success never comes in a day. It comes with time and hard work. With each passing year, we add creativity and a strong work ethics to the team.

Melanija Mitrović, PhD, Full Professor
Head of the CAM-FMEN (since 2019)

CAM-FMEN *has already organized the following research events*

CLASSICAL & CONSTRUCTIVE SEMIGROUPS AND APPLICATIONS, **ACaCS 2021**, September 6-10, 2021; http://acacs2020.masfak.ni.ac.rs/

CLASSICAL AND CONSTRUCTIVE NONASSOCIATIVE ALGEBRAIC STRUCTURES: FOUNDATIONS AND APPLICATIONS, **CaCNAS:FA 2021,** This event is dedicated to the memory of Nebojša Stevanović (1962-2009), June 30 – July 2, 2021; http://cacnas.masfak.ni.ac.rs/

MATHEMATICS FOR SOCIAL SCIENCES AND ARTS - ALGEBRAIC MODELING, **MS²A²M 2021,** 24-26 May, 2021; http://mathsocart.masfak.ni.ac.rs/

WEBINAR MATHEMATICS FOR HUMAN FLOURISHING IN THE TIME OF COVID AND POST COVID-19, 21 October 2020; http://camfmen.masfak.ni.ac.rs/Webinar_Covid.html

CONSTRUCTIVE MATHEMATICS: FOUNDATIONS AND PRACTICE, **CM:FP 2013**, June, 24-28, 2013; http://www2.masfak.ni.ac.rs/cmfp2013/

THEORETICAL COMPUTER SCIENCE – FROM FOUNDATION TO APPLICATION, **TCS-FA 09**, November, 7-11, 2009; http://www2.masfak.ni.ac.rs/tcs-fa09/

SUPPORT

As **CAM-FMEN** is a non-profit organization, the help of socially responsible companies, i.e. their sponsorships and donations, is indispensable for the successful realizations of our planned research activities.

As mathematics is considered to be

“as much part of our cultural heritage as art, literature, and music. Mathematics is the source of timeless profound knowledge, which goes to the heart of all matter and unites us across cultures, continents, and centuries” (Edward Frenkel, 2014),

we are looking forward to promoting mathematics and its applications together. If you have any questions, don’t hesitate to contact us.

Contact information

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Constructive Mathematics: Foundations and Practice

CM:FP 2023

June 26-30, 2023; Faculty of Mechanical Engineering, Niš, Serbia

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"Mathematics is that portion of our intellectual activity which transcends our biology and our environment."

Errett Bishop

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