



# SEquences and Their Applications (SETA-2024)

July 01-05, 2024, Colchester, United Kingdom

<https://seta-2024.github.io>



## Call for Papers

SEquences and Their Applications (SETA) is an internationally leading conference, aiming to foster fruitful interactions among sequences, signals, and waveforms designers, mathematicians, coding theorists, cryptographic researchers, and communications practitioners from all over the world. This esteemed conference has been hosted in a variety of international locales: SETA-1998 (Singapore), SETA-2001 (Bergen, Norway), SETA-2004 (Seoul, South Korea), SETA-2006 (Beijing, China), SETA-2008 (Lexington, USA), SETA-2010 (Paris, France), SETA-2012 (Waterloo, Canada), SETA-2014 (Melbourne, Australia), SETA-2016 (Chengdu, China), SETA-2018 (HongKong, China), SETA-2020 online (Bergen, Norway).

The topics of this workshop include, but are not limited to

### Sequences in District Structure

- Sequences over finite fields/rings
- Feedback shift register sequences
- Boolean functions and their cryptographic criteria
- Zero/Low-correlation sequences
- Low PAPR sequences
- Complementary sequences
- Combinatorial aspects of sequences
- Number-theoretic aspects of sequences
- Multidimensional sequences and arrays, Costas array

### Sequences for Cryptography and Coding

- Stream ciphers
- Complexity measures of sequences
- Randomness properties of sequences
- Design and decoding of error-correction codes
- Quantum coding theory

### Important Dates

- **March 15<sup>th</sup>, 2024: Deadline for submission**
- April 1<sup>st</sup>, 2024: Open for registration
- April 30<sup>th</sup>, 2024: Acceptance notification
- May 30<sup>th</sup>, 2024: Final submission
- Sept. 30<sup>th</sup>, 2024: Submission of full Papers

### Sequences and Waveforms Design for Communication and Radar

- Frequency Hopping Sequences
- Spectrum Spreading Sequences
- Non-orthogonal Multiple Access, e.g., code-domain NOMA
- Cognitive radio/radar
- Channel estimation
- Synchronization
- Signal Detection Theory
- Signal Processing
- MIMO communication/ radar

### Next-generation Sequences Design

- Deep learning-aided design of waveforms, codebooks, and channel codes
- Adaptive learning for channel estimation and signal detection
- Integrated sensing and communication
- Massive machine-type communicatio

### Submission

- Extended abstracts of 6-12 pages should be submitted in PDF format ([template.tex](#)) via this [easychair link](#), and a full version of an accepted asbtract will be invited to submit the Springer journal [CCDS](#)
- Researchers are also welcome to submit their recent results as [posters](#) at this [link](#)

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## Invited Speakers

- Pingzhi Fan, Southwest Jiaotong University, China
- Christos Masouros, University College London, United Kingdom
- Sihem Mesnager, University of Paris VIII, France
- Steven Wang, Carleton University, Canada
- Nam Yul Yu, GIST College, South Korea

## General Co-chair

- Tor Helleseth, University of Bergen, Norway
- Zilong Liu, University of Essex, United Kingdom

## Program Co-chair

- Guang Gong, University of Waterloo, Canada
- Daniel J. Katz, California State University, United States
- Chunlei Li, University of Bergen, Norway

## Technical Program Committee

- Serdar Boztas, RMIT University, Australia
- Lilya Budaghyan, University of Bergen, Norway
- Claude Carlet, University of Paris 8, France
- Chao-Yu Chen, National Cheng Kung University, Taiwan
- Nian Li, Hubei University, China
- Jonathan Jedwab, Simon Fraser University, Canada
- Nikolay S. Kaleyski, University of Bergen, Norway
- Oleksandr Kholosha, Ukrainian Catholic University, Ukraine
- Subhamoy Maitra, Indian Statistical Institute, Kolkata, India
- Kalikinkar Mandal, University of New Brunswick, Canada
- Wai Ho Mow, Hong Kong University of Science and Technology, China
- Ferruh Özbudak, Sabanci University, Turkey
- Alexander Pott, Otto-von-Guericke University Magdeburg, Germany
- Udaya Parampalli, University of Melbourne, Australia
- Constanza Riera, Western Norway University of Applied Sciences, Norway
- Sumanta Sarkar, University of Warwick, United Kingdom
- Hong-Yeop Song, Yonsei University, Korea
- Pante Stanica, Naval Postgraduate School, USA
- Arne Winterhof, Austrian Academy of Sciences, Austria
- Zhengchun Zhou, Southwest Jiaotong University, China

## Organizing Committee

- Wenqiang Yi, University of Essex, United Kingdom (Local Arrangement Chair)
- Dian Li, University of Bergen, Norway
- Palash Sarkar, University of Bergen, Norway

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