

IEEE International Workshop on Extreme URLLC towards 6G Connectivity

June 14–18, 2021
Montreal, Canada



General Co-chairs

Dr Na Yi
University of Surrey, UK

Prof Jiangzhou Wang
University of Kent, UK

Dr Zhibo Pang
ABB, Corporate Research,
Sweden

Dr George Agapiou
OTE Group, Greece

Main contact
n.yi@surrey.ac.uk

Important Dates

- ❖ Paper submission deadline:
January 20, 2021
- ❖ Notification of acceptance:
February 20, 2021
- ❖ Camera-ready papers:
March 1, 2021

Submission link
<https://edas.info/N27513>

Webpage link
<http://info.ee.surrey.ac.uk/CC/SR/IWSDN/>

Scope

As it is known, the number of connected devices and data traffic is exponentially increasing as time goes, and future data-intensive applications, (such as holographic communications, autonomous driving, high-precision manufacturing, and ultra-massive machine-type communications, etc.) would demand high-throughput, extremely ultra-reliable and low-latency communications (Extreme URLLC) with high energy efficiency. Recently, more and more research efforts have been dedicated to Extreme URLLC toward 6G connectivity to provide massive ubiquitous connections for anyone and anything with high-data rate irrespective of time and location. To approach this challenging goal, various technologies are being investigated and experimented. Hence it is important to have a timely workshop that will provide an opportunity to allow industry stakeholder, technical experts, and scientific researchers to share and discuss the different viewpoints through peer-reviewed papers in addition to invited papers. The objective of this workshop is to share the research findings of Extreme URLLC in all aspects and advance the state-of-the-art of future 6G networks. There are many open issues which should be discussed here, e.g.,

- What are the extreme URLLC impacts to the 6G connectivity?
- What are the enabling techniques required by extreme URLLC?
- How to achieve the goal of extreme URLLC with energy efficiency?

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Key use cases and requirements for Extreme URLLC for 6G connectivity
- “Wireless equivalence” for the Time Sensitive Networking (TSN) with Extreme URLLC
- Time synchronization for Extreme URLLC
- Native positioning techniques for Extreme URLLC
- Security for Extreme URLLC
- AI for extreme URLLC
- Cross-layer optimization techniques for Extreme URLLC for 6G
- Information theoretic limits for Extreme URLLC
- Task-off loading for Extreme URLLC for 6G connectivity
- Advanced modulation and coding schemes for Extreme URLLC
- Advanced physical-layer technologies for Extreme URLLC
- Prototypes and test beds for Extreme URLLC
- Future perspectives of Extreme URLLC
- Standardization roadmap and status on Extreme URLLC

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2021 official website: <https://icc2021.ieee-icc.org/authors>