

# Invited Talks (Confirmed)

- Noise in Imagers  
Shoji Kawahito, *Shizuoka University, Japan*
- Low-frequency noise in switched MOSFET circuits  
Alper Demir, *Koc University, Turkey*
- Phase noise and frequency stability in oscillators  
Enrico Rubiola, *Université Franche-Comté, France*
- Low Frequency Noise of Charge-Density and Spin Waves  
Alexander Balandin, *University of California, USA*
- Low-Frequency Noise in Low-Dimensional Molecular Metals  
Jens Müller, *Goethe-University Frankfurt, Germany*
- Low-Frequency Noise and Random Telegraph Noise in Nanoscale Devices: modeling and impact on circuit operation  
Christoforos Theodorou, *IMEP, France*
- Fundamental limits of thermal noise to time-domain signal processing  
Antonio Liscidini, *Toronto University, Canada*
- Noise at low temperature  
Marc Sanquer, *CEA-Léti, France*
- Noise in supercapacitors  
Janusz Smulko, *University of Gdansk, Poland*
- Low Frequency Noise in organic transistors  
Gino Giusi, *University of Messina, Italy*

More info on the website: <https://icnf2019.epfl.ch>

# Social Events

Tuesday 18 June:  
**Welcome Reception**  
Chateau de Neuchâtel

Wednesday 19 June:  
**Cultural Visit** Musée d'art et d'histoire  
Neuchâtel  
**Gala Dinner** Le Palais du Peyrou  
Neuchâtel

Thursday 20 June:  
**Cultural Visit**  
International Watch Museum  
La Chaux-de-Fonds

# Sponsors



# Chairs & Committees

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Christian Enz  
École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

## Co-Chair

Fabien Pascal  
Université de Montpellier, France

## Technical Area Chairs

**Stochastic Processes** - Ping Ao  
**Acoustic Noise** - Cheng Li  
**Electron Devices** - Gijs Bosman  
**Photonic Devices** - Shiva Kumar  
**Instrumentation** - Massimo Macucci  
**Imagers** - Assim Boukhayma

**Finance** - Michael Small  
**Theory** - Luca Varani  
**Biological Systems** - Sandro Carrara  
**Circuits and Systems** - Alessandro Pezzotta  
**Materials** - Arindam Ghosh  
**Reliability** - Gilson Wirth

## Regional Chairs

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# ICNF 2019

The International Conference on Noise and Fluctuations (ICNF) is a biennial event that brings together researchers interested in theoretical and experimental aspects of fluctuations across a wide spectrum of scientific and technological fields. Since the development of the theory of Brownian motion, the science of fluctuation has been one of the most important parts of physics. The investigation of noise and fluctuation is indispensable for the understanding of the physical processes in various microscopic and macroscopic systems.

This conference will be a great opportunity for noise researchers operating in very different areas of scientific and technological endeavor to come together and create the basis for continued and renewed cross-fertilization and collaboration.

The International Conference on Fluctuation Phenomena started in 1968 and moved all over the world.

For the first time the conference will take place in Switzerland: the 25th edition (ICNF 2019) will be held in Neuchâtel (Switzerland), from June 18 to June 21, 2019.

## EPFL

The Ecole Polytechnique Fédérale de Lausanne (EPFL) was founded in 1853 and became a national school in 1969. It is considered to be among the world's most prestigious universities of technology.

## MICROCITY

Microcity, inaugurated in 2014, is the new building of the Institute of Microengineering of EPFL in Neuchâtel. It also houses the entrepreneurs of the Neode Science Park. Microcity is part of the EPFL's strategy to bring research activities closer to industrial interests at all stage of the innovation process. Three of the eleven EPFL chairs of Microcity are funded by high-end watchmaker industries.



# Welcome to Neuchâtel



## About Neuchâtel

Neuchâtel is located on the northwestern shore of the Lake of Neuchâtel, in West Switzerland. On the side of the Jura Mountains, the environment is characterized by remote, windswept settlements and deep, rugged valleys. Neuchâtel is also in the heartland of the celebrated Swiss watchmaking industry.

## Accommodation

Several hotel rooms have already been reserved for the workshop participants. Information, prices and contacts are listed on the ICNF 2019 website.

## Venue

Neuchâtel is easily reachable by plane or by train from anywhere in Europe. Direct trains to Neuchâtel station leave approximately every hour from Geneva Airport and Zurich Airport.

Microcity is 1km (less than 10 minutes walking) from Neuchâtel train station and is reachable by public transports.

## Contact

icnf2019@epfl.ch  
+41 (0)21 6954343

For more information, visit  
<http://icnf2019.epfl.ch>



# Topics

- Theory of noise, fluctuations and stochastic processes.
- Noise and fluctuations in materials.
- Noise and fluctuations in electronic devices.
- Noise and fluctuations in optic, optoelectronic and photonic devices and systems.
- Noise and fluctuations in mesoscopic and nanostructured devices.
- Noise in circuits and systems.
- Noise in communications.
- Multiscale dynamics.
- Noise and fluctuations in biological systems.
- Noise and fluctuations in social and financial systems.
- Noise modelling and simulation.
- Measurement techniques of noise and fluctuations.
- Noise as diagnostic tool, noise and device reliability.
- Acoustic noise.
- Other aspects of noise and fluctuation phenomena.

## Specific sessions will be organized on:

- Noise of semiconductor devices at cryogenic temperatures.
- Noise of imaging systems: characterization and low-noise design techniques.
- Noise and fluctuations in high-energy physics.
- Time-domain instabilities: phase noise in RF circuits and systems
- Noise and fluctuations in biophysical systems
- Noise in audio processing systems

# Important Dates

## Submission of single-page abstracts:

**25 January 2019**    **15 February 2019**

## Notification of acceptance:

**1 March 2019**    **15 March 2019**

## Submission of full papers:

**29 March 2019**    **19 April 2019**