

25th International Conference on
Noise and Fluctuations
ICNF 2019

Proceedings

18 - 21 June 2019

EPFL Neuchâtel campus - Neuchâtel, Switzerland

Hosted by:

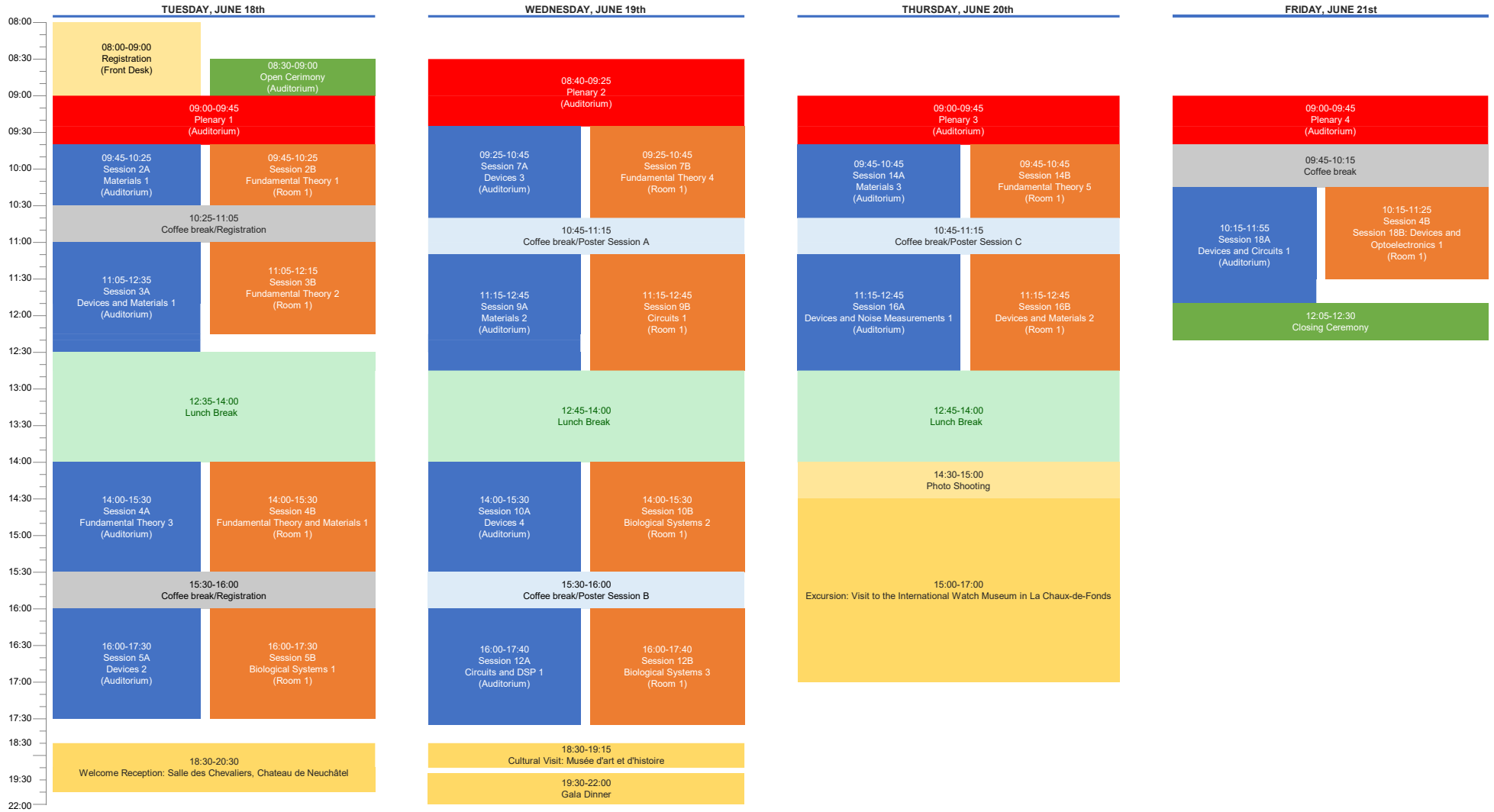
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SCHEDULE AT GLANCE



ICNF19 WELCOME RECEPTION

Where: Salle des Chevaliers of Neuchâtel Castle, rue du Château 1, 2000 Neuchâtel
When: June 18th, 18h30

About

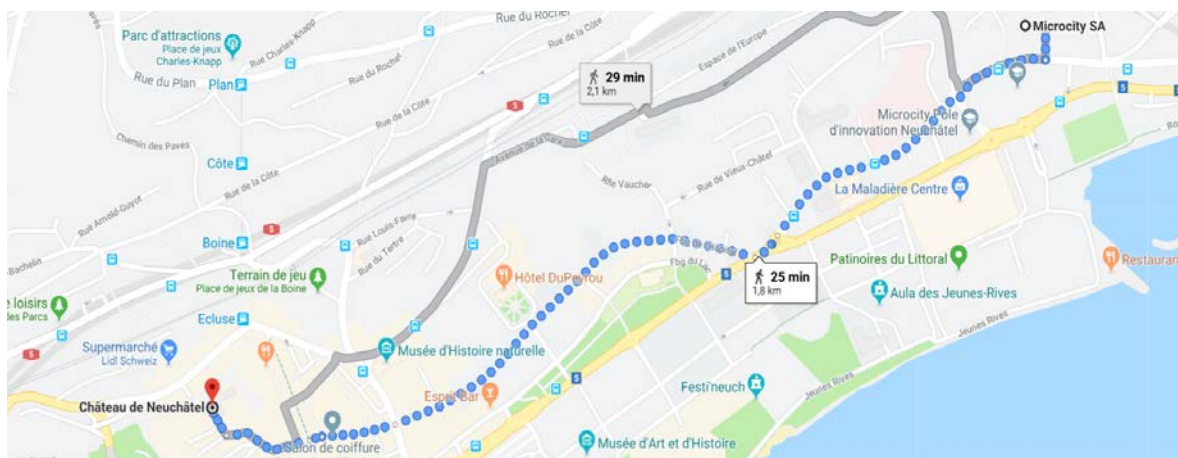
Neuchâtel Castle is located at the eastern end of a ridge overlooking the heart of the city. It had been a Residence of lords and counts of Neuchâtel from the end of the 12th century. From the 16th century, the castle was occupied by governors and service accommodations. The cantonal administration is now installed there for at least two centuries. Most of the buildings date back to the 15th century; a Romanesque main building, dating from the end of the 12th century, is the oldest civilian building in Switzerland used without interruption.



Reaching Neuchâtel castle

Neuchâtel Castle is around 2km far from Microcity building and is easily reachable:

- By foot on 25 minutes, through the city center
- By public transports on 15 minutes. Take the bus from [TransN](#) line 101 from the bus stop « Microcity » to the bus stop « Croix du Marché » (7 stops). Then it takes 5 minutes by foot through the old city center.



ICNF19 JAQUET-DROZ AUTOMATONS VISIT

Where: Art and history museum of Neuchâtel, Esplanade Léopold-Robert 1, 2000 Neuchâtel

When: June 19th, 18h30

About

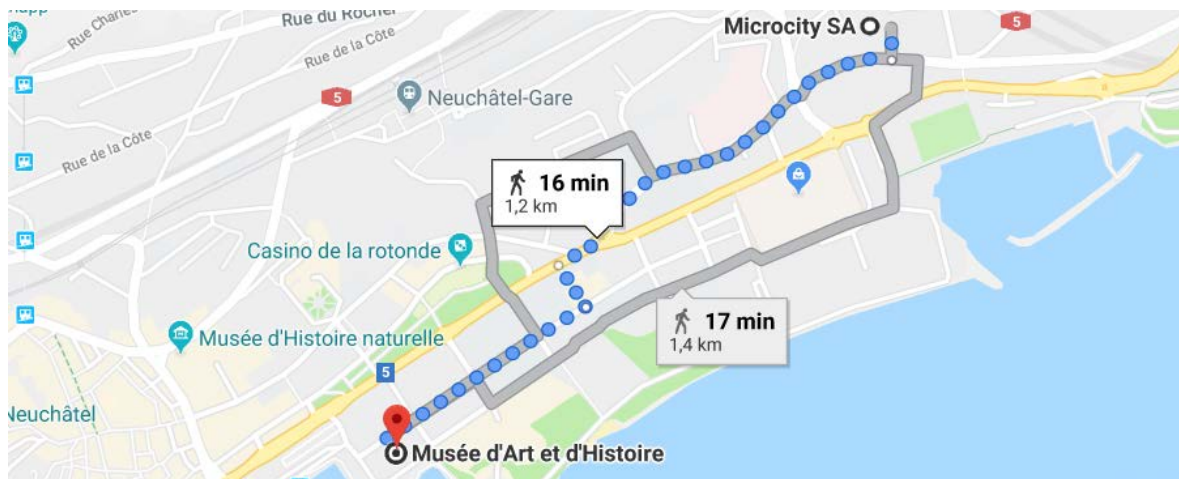
The Writer, the Musician and the Draftsman were created between 1768 and 1774 by the exceptional watchmakers Pierre Jaquet-Droz, his son Henri-Louis and Jean-Frédéric Leschot. These three famous automatons held in the art and history museum will be presented by a live demonstration in English.



Reaching the art and history museum from Microcity Building

The art and history museum of Neuchâtel is around 1.2km far from Microcity building and is easily reachable:

- By foot on 17 minutes by la Rue des Beaux-Arts, along the lake
- By public transports on 10 minutes. Take the bus from [TransN](#) line 101 from the bus stop « Microcity » to the bus stop « Jardin Anglais » (4 stops). Then it takes 2 minutes by foot.



ICNF19 GALA DINNER

Where: Hotel du Peyrou, Avenue du Peyrou 1, 2000 Neuchâtel

When: June 19th, 19h30

About

Hotel Du Peyrou is an 18th century house located in the city of Neuchâtel. A jewel of Neuchâtel architecture, it houses a renowned gourmet restaurant.

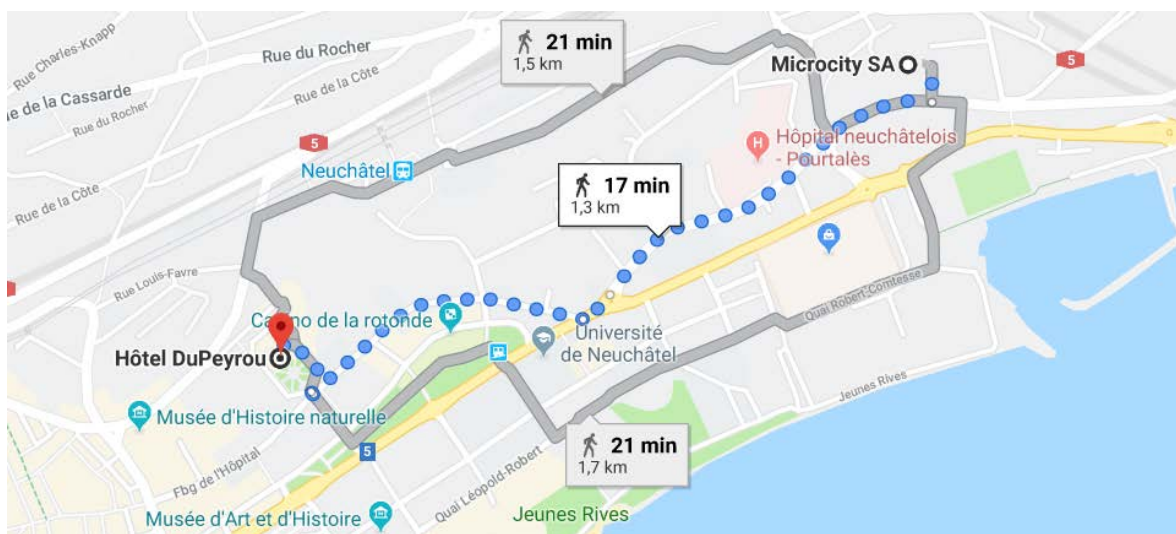
ICNF19 gala dinner will take place on historic lounges of the first floor of the building.



Reaching the hotel du Peyrou from Microcity Building

The hotel du Peyrou is around 1.2km far from Microcity building and is easily reachable:

- By foot on 17 minutes
- By public transports on 10 minutes. Take the bus from [TransN](#) line 101 from the bus stop « Microcity » to the bus stop « Jardin Anglais » (4 stops). Then it takes 3 minutes by foot.



ICNF19 INTERNATIONAL WATCHMAKING MUSEUM VISIT

Where: International watchmaking museum, Rue des Musées 29, 2301 La Chaux-de-Fonds

When: June 20th, 14h45

About

The international watchmaking museum (MIH) is devoted to watchmaking and to the study of time and time measurements instruments. It is owned and managed by the city of La Chaux-de-Fonds and is classified as a *Swiss cultural property of national importance*.



Reaching the international watchmaking museum from Microcity Building

The international watchmaking museum is located in the city of La Chaux-de-Fonds. It is around 22km far from Neuchâtel city.

A transportation service will be organized for all ICNF19 participants from Neuchâtel:

- To go: **Please meet at 14h45 outside of Microcity building. Arrival planned at 15h20.**
- To return: **Please meet at 17h00 outside of the international watchmaking museum. Arrival planned at 17h35.**

In case you prefer reaching the museum by your own, it is easily reachable by train or car. Please do not hesitate to ask the organizers for more information, by email to icnf2019@epfl.ch.

Tuesday, June 18th

Registration	08:00-09:00
Open Ceremony	08:30-09:00
Plenary Talk 1 Auditorium	09:00-09:45
Ultra-Low-Noise Design of CMOS Image Sensors toward Photoelectron-Counting-Based Wide Dynamic Range Imaging <i>Shoji Kawahito</i>	09:00-09:45
Session 2A: Materials 1 Auditorium	09:45-10:25
Detection of Shot Noise in Solar Cells and LEDs Using Cross-Correlation Current Noise Spectroscopy <i>Kevin Davenport, Andrey Rogachev and Mark Hayward</i>	09:45-10:05
Low frequency noise deviation from Schottky theory in p-n junctions <i>Jean-Guy Tartarin, Jacques Graffeuil and Laurent Escotte</i>	10:05-10:25
Session 2B: Fundamental Theory 1 Room 1	09:45-10:25
Low-Frequency Noise of Magnons <i>Sergey Rumyantsev, Michael Balinskiy, Fariborz Kargar, Alexander Khitun and Alexander Balandin</i>	09:45-10:05
Fluctuation -Dissipation-Dispersion Relation for Slow Processes and Quality Factor for Oscillation Systems <i>Viacheslav Belyi</i>	10:05-10:25
Coffee break/Registration	10:25-11:05
Session 3A: Devices and Materials 1 Auditorium	11:05-12:35
Charge carrier dynamics of strongly-correlated electrons in low-dimensional molecular metals studied by fluctuation spectroscopy <i>Jens Müller</i>	11:05-11:35
Lorentzian noise approach for 1D transport studies <i>M Petrychuk, I Zadorozhnyi, Yu Kutovyi, S Karg, H Riel and Svetlana Vitusevich</i>	11:35-11:55
Prehistory probability distribution of ion transition through graphene nanopore <i>Carlo Guardiani, William Gibby, Miroslav Barabash, Dmitry Luchinsky, Igor Khovanov and Peter McClintock</i>	11:55-12:15
Resistivity Characteristics and Noise Spectroscopy of Composites with Carbon Fiber Felts <i>Marina Tretjak, Sandra Pralgauskaitė, Jonas Matukas, Ieva Kranauskaitė, Jan Macutkevič, Jūras Banys, Vanessa Fierro, Alain Celzard and Blagoj Karakashov</i>	12:15-12:35
Session 3B: Fundamental Theory 2 Room 1	11:05-12:15
Noise-induced nonlinear dynamics of high Q nanomechanical resonators <i>Eva M. Weig</i>	11:05-11:35
Analysis of the ultimate noise performance of a mesoscopic cavity magnetic sensor <i>Massimo Macucci and Paolo Marconcini</i>	11:35-11:55
An Itô-Stratonovich dilemma-free treatment for nonlinear oscillators with colored noise <i>Michele Bonnin, Fabrizio Bonani and Fabio Traversa</i>	11:55-12:15
Lunch	12:35-14:00
Session 4A: Fundamental Theory 3 Auditorium	14:00-15:30
Design and realization of ultra-low noise cryoHEMTs for cryogenic readout electronics <i>Yong Jin, Quan Dong, Laurent Couraud, Antonella Cavanna, Ulf Gennser, Christian Ulysse and Edmond Cambril</i>	14:00-14:30
Shot noise and squeezing in the conduction channel of a Field Effect Transistor at ultra-low temperature <i>Anthoni Manseau, Édouard Pinsolle, Christian Lupien and Bertrand Reulet</i>	14:30-14:50
Discussion of the flicker noise origin at very low temperature and polarisation operation <i>Dimitri Boudier, Bogdan Cretu, Eddy Simoen, Anabela Veloso and Cor Claeys</i>	14:50-15:10
Generation-recombination noise of magnetic monopoles in spin ice <i>Alexey Klyuev, Mikhail Ryzhkin and Arkady Yakimov</i>	15:10-15:30
Session 4B: Fundamental Theory and Materials 1 Room 1	14:00-15:30
Electronic noise due to temperature differences across nanoscale conductors: beyond standard thermal and shot noises <i>Oren Tal</i>	14:00-14:30
Magneto-Electric Diffusion of Electrons in Gallium Nitride: a Monte Carlo Analysis <i>Galina Syngayivska, Vadym Korotyeyev, Viacheslav Kochelap and Luca Varani</i>	14:30-14:50
Probabilistic analysis of two models of ideal memristor with external noise <i>Anna Kharheva, Alexander Dubkov and Bernardo Spagnolo</i>	14:50-15:10
Noise-delayed decay for Levy flights in unstable parabolic potential <i>Alexander Dubkov, Bartłomiej Dybiec, Bernardo Spagnolo and Davide Valenti</i>	15:10-15:30
Coffee break/Registration	15:30-16:00
Session 5A: Devices 2 Auditorium	16:00-17:30

RF Noise Benchmark Tests for MOSFETs <i>Andries J. Scholten, Gert-Jan Smit, Ralf M. T. Pijper and Luuk F. Tiemeijer</i>	16:00-16:30
1/f Noise in Fully Integrated Electrolytically Gated FinFETs with Fin Width Down to 20nm <i>Koen Martens, Bert Du Bois, Yong Kong Siew, Anshul Gupta, Anabela Veloso, Emmanuel Dupuy, Dunja Radisic, Efrain Altamirano Sanchez, Willem Van Roy, Simone Severi and Eddy Simoen</i>	16:30-16:50
Processing Impact on the Low-Frequency Noise of 1.8 V Input-Output Bulk FinFETs <i>Cor Claeys, Geert Hellings, Hiroaki Arimura, Bertrand Parvais, Lars-Åke Ragnarsson, Harold Dekkers, Tom Schram, Dimitri Linten, Naoto Horiguchi, Eddy Simoen, Dimitri Boudier and Bogdan Cretu</i>	16:50-17:10
A 4-Terminal Method for Oxide and Semiconductor Trap Characterization in FDSOI MOSFETs <i>Hung Chi Han, Christoforos Theodorou and Gerard Ghibaudo</i>	17:10-17:30
Session 5B: Biological Systems 1 Room 1	16:00-17:30
Low-Frequency Noise in Electrochemical Sensors for Water Quality Monitoring <i>Arif Ul Alam, Sumit Majumder, Ching-Hung Chen, Ognian Marinov and Jamal Deen</i>	16:00-16:30
Nanoimprint technology for liquid-gated Si nanowire FET biosensors: Noise spectroscopy analysis <i>V Handziuk, Yu Kutovyi, H Hlukhova, I Zadorozhnyi, N Boichuk, M Petrychuk and Svetlana Vitusevich</i>	16:30-16:50
Ascorbate Detection Using Single Trap Phenomena in Two-Layer Si NW FETs <i>Yurii Kutovyi, Ihor Zadorozhnyi, Natalia Naumova, Nazarii Boichuk, Mykhaylo Petrychuk and Svetlana Vitusevich</i>	16:50-17:10
Noise in Single-Trap Punctual Nanobiosensors <i>Ihor Zadorozhnyi, Yurii Kutovyi, Soo Hyeon Kim, Teruo Fujii, Andreas Offenhäusser, Svetlana Vitusevich and Nicolas Clément</i>	17:10-17:30
Welcome Reception: Salle des Chevaliers, Chateau de Neuchâtel	18:30-20:30

Wednesday, June 19th

Plenary Talk 2 Auditorium	08:40-09:25
Nonstationary Low Frequency Noise in Switched MOSFET Circuits and Circuit Simulation <i>A. Gokcen Mahmutoglu and Alper Demir</i>	08:40-09:25
Session 7A: Devices 3 Auditorium	09:25-10:45
Reduction of the Low Frequency Noise and Negative Photoconductivity in HgTe Quantum Wells <i>Sergey Rumyantsev, Ivan Yahniuk, Dmytro But, Grzegorz Cywinski, Bartłomiej Grzywacz, Nikolay Mikhailov, Sergey Dvoretzky, Jerzy Łusakowski and Wojciech Knap</i>	09:25-09:45
Micromagnetic Modeling of Telegraphic Mode Jumping in Microwave Spin Torque Oscillators <i>Gunnar Malm, Anders Eklund and Mykola Dvornik</i>	09:45-10:05
Detection of high frequency cyclostationary third moment of current fluctuations in a tunnel junction <i>Pierre Fevrier, Christian Lupien and Bertrand Reulet</i>	10:05-10:25
Shot-noise of high-impedance quantum devices using impedance matching <i>Christian Schoenenberger, Thomas Hasler, Gabriel Puebla-Hellmann, Vishal Ranjan, Cezar Harabula, Roy Haller, Minkyung Jung and Gergö Fülöp</i>	10:25-10:45
Session 7B: Fundamental Theory 4 Room 1	09:25-10:45
Fluctuation analysis of repetitive writing motion by using DFA <i>Masafumi Uchida</i>	09:25-09:45
Making the eavesdropper's life harder <i>Gergely Vadai and Laszlo Kish</i>	09:45-10:05
Randomness assists in wireless connectivity <i>Sumit Kumar, Taniya Singh, Rajib Jha and Mohammad Akhlaqur Rahman</i>	10:05-10:25
Noise Injection/machine learning Fraud Detection Framework in Time Series Data <i>Aristidis Magklaras, Nikolaos Andriopoulos and Alexios Birbas</i>	10:25-10:45
Session 8: Coffee break/Poster Session A	10:45-11:15
Dynamic Stochastic Resonance Based Blocking Artifacts Removal from Compressed Images in DCT Domain <i>Rajib Jha, Pramod Kumar Tiwari, Onkar Krishna, Jawar Singh and Saurabh Kumar Pandey</i>	10:45-11:15
Atomistic model of reptation at polymer interfaces <i>Dmitry Luchinsky, Halyna Hafiychuk, Miroslav Barabash, Vasyl Hafiychuk, Kevin Wheeler, Peter McClintock and Taku Ozawa</i>	10:45-11:15
Determination of activation energies of oxygen ion diffusion in memristor systems from the flicker noise spectrum <i>Alexey Klyuev, Arkady Yakimov, Dmitry Filatov, Oleg Gorshkov, Dmitry Antonov, Dmitry Liskin, Ivan Antonov and Yulia Anikina</i>	10:45-11:15
Coherent and Conventional Gravidynamic Quantum 1/f Effects <i>Peter H Handel</i>	10:45-11:15
Session 9A: Materials 2 Auditorium	11:15-12:45
Noise in Diffusive Conductor <i>Edouard Pinsolle, Samuel Houle, Christian Lupien and Bertrand Reulet</i>	11:15-11:45
Fluctuation Scaling in Nano-Interconnects and its Application to Electromigration <i>Sofie Beyne and Tim Beyne</i>	11:45-12:05
Finite frequency noise: an original probe for topological superconductors <i>Jerome Rech, Didier Bathellier, Laurent Raymond, Thibaut Jonckheere, Alex Zazunov and Thierry Martin</i>	12:05-12:25

Noise Measurements on MnSi thin films <i>Merlin Mitschek, David Schroeter, Dirk Menzel, Stefan Süllow and Jens Müller</i>	12:25-12:45
Session 9B: Circuits 1 Room 1	11:15-12:45
LFN and RTN in Nanoscale Devices: Modeling and Impact on Circuit Operation <i>Christoforos Theodorou and Gerard Ghibaudo</i>	11:15-11:45
In-situ noise system measurement for SiGe HBT characterization at 150 GHz <i>Simon Bouvot, Joao Carlos Azevedo Gonçalves, Thomas Quémerais, Daniel Gloria, Guillaume Ducournau, Sylvie Lépilliet and François Danneville</i>	11:45-12:05
Integrated W-Band Measurement System Combining IMD, S-Parameters and Noise Figure Suitable for Coax, Waveguide and On-Wafer Test <i>Joel Dunsmore and Suren Singh</i>	12:05-12:25
Analysis on Noise Requirements of RF Front-End Circuits for Spin Qubit Readout <i>Yatao Peng, Andrea Ruffino and Edoardo Charbon</i>	12:25-12:45
Lunch	12:45-14:00
Session 10A: Devices 4 Auditorium	14:00-15:30
Contact effects, Stability and Noise Investigation in Organic Thin-Film Transistors <i>Gino Giusi, Graziella Scandurra, Sabrina Calvi, Guglielmo Fortunato, Matteo Rapisarda, Luigi Mariucci and Carmine Ciofi</i>	14:00-14:30
Low frequency noise characterization of Si Nanonet Field Effect Transistors <i>Thibault Cazimajou, Christoforos Theodorou, Mireille Mouis, Thi Thu Thuy Nguyen, Maxime Legallais, Céline Ternon and Gérard Ghibaudo</i>	14:30-14:50
A cost-competitive low Noise Junction-FET (JFET) for high precision Analog Application <i>Qiang Ai, Suba Subramaniam, Michaelina Ong and Manoj Chandrika</i>	14:50-15:10
Low-frequency noise behavior of nMOSFETs with different Al₂O₃ capping layer thickness and TiN gate <i>Danghui Wang, Eddy Simoen, Cor Claeys, Bogdan Govoreanu, Stefan Kubicek, Julien Jussot, B.T. Chan, Nard Dumoulin-Stuyck, Iuliana Radu and Dan Mocuta</i>	15:10-15:30
Session 10B: Biological Systems 2 Room 1	14:00-15:30
Noise in Interacting Biological Systems <i>Tomislav Stankovski, Peter McClintock and Aneta Stefanovska</i>	14:00-14:30
Parameter change of propagating waves in dominant arms and non-dominant arms using multichannel surface electrogram <i>Marzieh Aliabadi Farahani, Miki Haruna, Kota Akehi, Kazuyuki Mito, Tota Mizuno and Naoaki Itakura</i>	14:30-14:50
Method to extract latent semantic components from noisy categorical time-series data applied to human sleep stage data <i>Ikuhiro Yamaguchi, Akifumi Kishi, Fumiharu Togo and Yoshiharu Yamamoto</i>	14:50-15:10
Diffusion noise as a tool for in-vitro investigation of interacting biomolecules <i>Mathias Lechelon, Matteo Gori, Marco Pettini, Yoann Meriguet, Anastasiia Kudashova, Marlon Sidore, Jeremie Torres and Luca Varani</i>	15:10-15:30
Session 11: Coffee break/Poster Session B	15:30-16:00
Study of Low Frequency Noise Parameters of Metal Contacts <i>Alexander Ermachikhin, Vladimir Litvinov, Tatiana Kholomina, Nikolay Rybin, Andrey Semenov, Loginov and Krutchenko</i>	15:30-16:00
An FPGA Based Practical Implementation of Stochastic Resonance For Image Enhancement <i>Sumit Kumar, Sudha Chauhan and Rajib Jha</i>	15:30-16:00
Cosmic Nonstationarity of the Coherent Gravidynamic Quantum 1/f Effect <i>Peter H Handel and Erika Splett</i>	15:30-16:00
Temporal stability measurements of a cooled infrared type II superlattice (T2SL) focal plane array detector <i>Vignesh Arounassalame, Jean Nghiem, Maxence Guenin, Eric Costard, Philippe Christol and Isabelle Ribet-Mohamed</i>	15:30-16:00
Characterization methods of low frequency RTS noise in HgCdTe infrared detectors <i>Maxence Guénin, Sophie Derelle, Marcel Caes, Laurent Rubaldo and Isabelle Ribet-Mohamed</i>	15:30-16:00
Session 12A: Circuits and DSP 1 Auditorium	16:00-17:40
Pulse Detection with a Multi-state System <i>Roy Howard</i>	16:00-16:20
Noise and Linearity of High-Speed SiGe HBT Cells in CE and CB Configuration <i>Paulius Sakalas, Anindya Mukherjee and Michael Schroter</i>	16:20-16:40
Implementing software defined noise generators <i>Robert Mingesz and Dénes Faragó</i>	16:40-17:00
Radon Transform and Dynamic Stochastic Resonance based Technique for Line Detection from Noisy Images <i>Rajib Kumar Jha and Badal Soni</i>	17:00-17:20
Suprathreshold Stochastic Resonance for Gamma Noise with Watermarking Application <i>Sumit Kumar, Nancy Chauhan and Rajib Jha</i>	17:20-17:40
Session 12B: Biological Systems 3 Room 1	16:00-17:40
Effect of Clustering on the Fluctuation in Binding Activity of Sugar Chains to Influenza Viruses <i>Toshio Kawahara</i>	16:00-16:20
Statistical theory of mixed-valence selectivity in biological ion channels <i>William Gibby, Miraslau Barabash, Carlo Guardiani, Dmitry Luchninsky and Peter McClintock</i>	16:20-16:40

Interplay between channel and shot noise in subthreshold voltage fluctuations of neural membranes <i>Beatriz G. Vasallo, Javier Mateos and Tomás González</i>	16:40-17:00
1/f DNA Hydrogen-Bond Energy Noise <i>Nazarii Boichuk, Yurii Kutovyi, Nicolas Lobato-Dauzier, Anthony Genot, Teruo Fujii, Andreas Offenhäuser, Svetlana Vitusevich and Nicolas Clément</i>	17:00-17:20
The dynamics of quasiparticles in the KcsA biological ion channel <i>Miraslau L. Barabash, William A.T. Gibby, Dmitry G. Luchinsky, Carlo Guardiani, Igor A. Khovanov and Peter V.E. McClintock</i>	17:20-17:40
Cultural Visit: Musée d'art et d'histoire	18:30-19:15
Gala Dinner	19:30-22:00

Thursday, June 20th

Plenary Talk 3 Auditorium	09:00-09:45
The Origin and the Measurement of Phase Noise in Oscillators <i>Enrico Rubiola</i>	09:00-09:45
Session 14A: Material 3 Auditorium	09:45-10:45
Noise spectroscopy-based gas identifying methods to improve the selectivity of MOX gas sensors. <i>Thierry Contaret, Nicolas Morati, Sami Gomri, Tomas Fiorido, Jean-Luc Seguin and Marc Bendahan</i>	09:45-10:05
Bulk induced 1/f noise in topological insulators <i>Saurav Islam, Semonti Bhattacharyya, Hariharan Nhalil, Anthony Richardella, Abhinav Kandala, Nitin Samarth and Arindam Ghosh</i>	10:05-10:25
Trapping Investigation of the GaN HEMT Devices Using the Low Frequency Noise Characterization <i>Mohamed Bouslama, Jean-Christophe Nallatamby and Michel Prigent</i>	10:25-10:45
Session 14B: Fundamental Theory 5 Room 1	09:45-10:45
1/f Noise Generated with the Branching Process Model <i>Takayuki Kobayashi</i>	09:45-10:05
Thomson Scattering in Inhomogeneous Plasmas: The Role of the Fluctuation-Dissipation Theorem <i>Viacheslav Belyi</i>	10:05-10:25
Quantum 1/f Noise –a Decoherence Phenomenon <i>Peter H Handel</i>	10:25-10:45
Session 15: Coffee break/Poster Session C	10:45-11:15
Low frequency noise of GaSb layers on GaAs substrate <i>Lukasz Ciura, Andrzej Kolek, Krzysztof Czuba, Iwona Sankowska and Agata Jasik</i>	10:45-11:15
Using the velocity auto-correlation function to characterize functional "noise" in bio-molecules <i>Marlon Sidore, Yoann Meriguet, Anastasiia Kudashova, Mathias Lechelon, Matteo Gori, Marco Pettini, Jeremie Torres and Luca Varani</i>	10:45-11:15
Energy and Area Aware Digital Fingerprint Generator Using Intrinsic Randomness <i>Jawar Singh, Sandeepkumar Pandey, Rajib Kumar Jha and Pramod K Tiwari</i>	10:45-11:15
Effects of mechanical stress on electrical parameters and noise of supercapacitors <i>Arkadiusz Szewczyk, Łukasz Lentka and Janusz Smulko</i>	10:45-11:15
Session 16A: Devices and Noise Measurements 1 Auditorium	11:15-12:45
Noise in electrical double-layer capacitors (EDLCs) <i>Janusz Smulko, Arkadiusz Szewczyk and Łukasz Lentka</i>	11:15-11:45
Ultra-low noise, single JFET voltage pre-amplifier for low frequency noise measurements <i>Graziella Scandurra, Carmine Ciofi and Gino Giusi</i>	11:45-12:05
Low frequency noise characterization and modeling of SiGe HBT featuring LASER annealing in a 55-nm CMOS node <i>Johnny El Beyrouthy, Alexandre Vauthelin, Bruno Sagnes, Fabien Pascal, Alain Hoffmann, Matteo Valenza, Sébastien Haendler, Alexis Gauthier, Pascal Chevalier and Daniel Gloria</i>	12:05-12:25
Low-Frequency Noise in InGaZnO Thin-Film Transistors with Al₂O₃ Gate Dielectric <i>Horacio Londono, Yu-Chieh Chien, Luis Hoffman, Manoj Nag, Sebastian Haesler, Soeren Steudel and Jan Genoe</i>	12:25-12:45
Session 16B: Devices and Materials 2 Room 1	11:15-12:45
Adhesive Low Frequency Noise (LFN) in Charge Trap Transistors (CTT) for Neuromorphic Analog Processing <i>Alexios Birbas</i>	11:15-11:35
Low-frequency noise considerations for sensors based on manganites <i>Bruno Guillet, Ammar Aryan, Luiz Enger, Stéphane Flament, Marc Lam Chok Sing, Sylvain Lebargy, Shuang Liu, Laurence Méchin, Vanuza Nascimento Marques, Olivier Rousseau, Jean-Marc Routoure and Sheng Wu</i>	11:35-12:05
Low Noise Characteristics of Schottky Diode with Deep Energy Level <i>Alexander Ermachikhin, Vladimir Litvinov, Tatiana Kholomina and Andrey Semenov</i>	12:05-12:25
Lunch	12:45-14:00
Photo Shooting	14:00-14:30

Excursion: Visit to the International Watch Museum in La Chaux-de-Fonds 15:00-17:00

Friday, June 21st

Plenary Talk 4 Auditorium	09:00-09:45
Low-Frequency Noise in Low -Dimensional van der Waals Materials <i>Alexander Balandin and Sergey Rumyantsev</i>	09:00-09:30
Coffee break	09:45-10:15
Session 18A: Devices and Circuits 1 Auditorium	10:15-11:55
Thermodynamics limits in Oscillators and Phase Locked Loops <i>Armina Khakpour and Antonio Liscidini</i>	10:15-10:45
Statistics of low-frequency noise in MOSFETs <i>Andries J. Scholten, Thiago H. Both, Maurício Banaszkeski da Silva, Gilson I. Wirth, Hans P. Tuinhout, Adrie T. A. Zegers-van Duijnhoven and Jeroen A. Croon</i>	10:45-11:15
Random Telegraph Signal Fluctuations of Dark Count Rate in CMOS SPAD Structures <i>Francesco Di Capua, Daniela Fiore, Marcello Campajola, Ettore Sarnelli and Ciro Nappi</i>	11:15-11:35
A kTC Noise Analysis in a Passive Switched-Capacitor Correlated Multiple Sampling Circuit for CIS <i>Raffaele Capocchia, Assim Boukhayma and Christian Enz</i>	11:35-11:55
Session 18B: Devices and Optoelectronics 1 Room 1	10:15-11:25
Nanoscopy of charge kinetics via terahertz fluctuation <i>Qianchun Weng, Zhenghua An, Wei Lu and Susumu Komiyama</i>	10:15-10:45
Low Frequency Noise Spectroscopy of GaN Bow-Tie THz Detectors <i>Sandra Pralgauskaitė, Jonas Matukas, Evaldas Kažukauskas, Irmantas Kašalynas, Vytautas Janonis and Paweł Prystawko</i>	10:45-11:05
THz noise mapping of hot electron dynamics in Landauer-like resistors <i>Zhenghua An, Le Yang, Ruijie Qian, Qianchun Weng, Susumu Komiyama and Wei Lu</i>	11:05-11:25
Closing Ceremony	12:05-12:35