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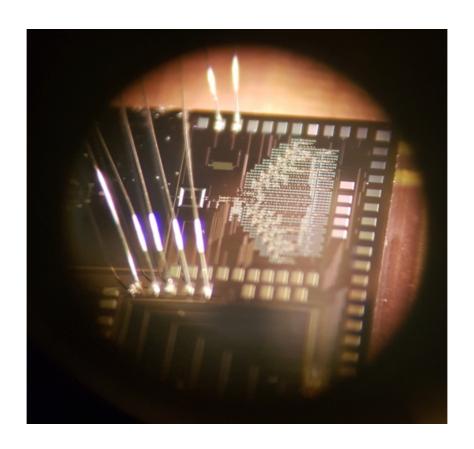AGENCE NATIONALE DE LA RECHERCHE

ANR

# Superconducting Supercomputing

*based on Josephson Junctions (S2J2)*

**Website** : http://superconductingelectronics.org/s2j2019/



Paris – Irish Cultural Center

Centre Culturel Irlandais

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28-29 November 2019

# Superconducting Supercomputing
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## Scientific Program

### Thursday, November 28

12h00–14h00  Arrival of participants – Lunch & coffee on-site

### Session I : Current status of superconducting electronics in wider Europe

14h00–14h20  **Global presentation on the stakes of superconducting electronics**
Pascal Febvre – Université Savoie Mont Blanc, France

14h20–14h40  **The FLUXONICS Foundry at Leibniz IPHT in Jena – technologies, circuits and applications**
Juergen Kunert – Leibniz IPHT, Jena, Germany

14h40–15h00  **New possibilities for superconducting electronics from new materials combinations**
Hans Hilgenkamp – Twente University, Enschede, The Netherlands

15h00–15h20  **A new Quantum Metrology Laboratory (KML) at the National Metrology Institute of Turkey**
Mustafa Arikan – TÜBİTAK UME National Metrology Institute of Turkey

15h20–15h40  **Current Status of Superconducting Computing Efforts at TOBB ETU**
Ali Bozbey – TOBB University of Economics and Technology, Ankara, Turkey

15h40–16h00  **Superconducting hybrid solutions for quantum technologies**
Giampiero Pepe – University of Naples, Italy

16h00–16h30 coffee break

16h30–16h50  **Looking for new superconducting materials for quantum devices**
Alexander Kordyuk – Kyiv Academic University, Ukraine

## Session II : Enabling superconducting electronics

16h50–17h10 **Cryorefrigeration for superconducting or quantum computers: state of the art and future trends**

Alain Ravex – Cryoconsult

17h10–17h30 **ACE-Cube, a versatile cryogenic platform for superconducting components integration & testing**

Julien Tanchon – Absolut System, France

17h30–17h50 **Air Liquide high efficiency and reliability Claude cycle based proven commercial solutions for large cooling capacity in the range 4K-1.8K**

Simon Crispel – Air Liquide, France

17h50–18h10 **Saving on refrigeration by working in the coolest place: space**

Riccardo Bernardini – University of Udine, Italy

18h10–18h30 **Software development and technology for Science and Education**

Olena Protsenko – Sumy University, Ukraine

18h30–18h50 **Professional software tools for design of complex superconducting circuits**

Sasan Razmkhah – Université Savoie Mont Blanc, France

18h50–19h10 **Wrap-up**

**20h30 Dinner at Lilane restaurant (8 rue Gracieuse – 75005 PARIS – <u>Where is it?</u> )**