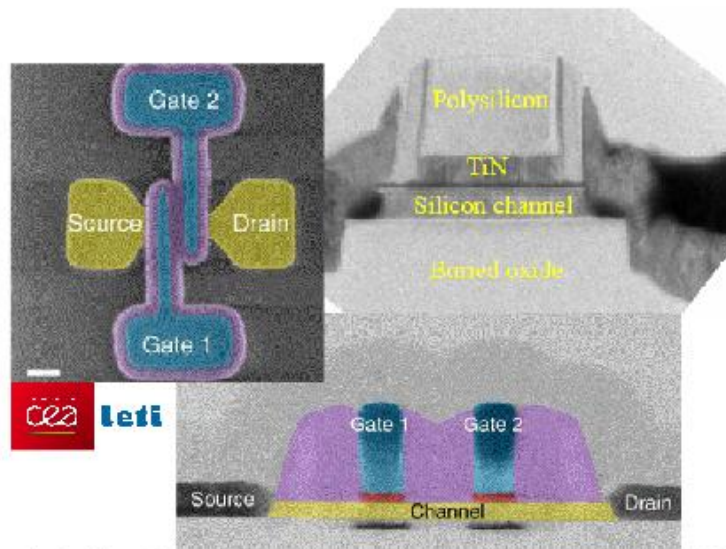


**Symposium on Schottky Barrier  
MOS Devices 2019**  
**“Towards neuromorphic and  
quantum computing applications”**



Images taken from Maurand, R. et al. A CMOS silicon spin qubit. Nat. Commun. 7, 13575 doi: 10.1038/ncomms13575 (2016)  
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**Organized by:**

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- Dr. Mireille Mouis, IMEP-LAHC, Grenoble INP, France
- Dr. Mike Schwarz, Robert Bosch GmbH, NanoP, Germany

**Paris, France, 4th October 2019**

## Symposium on Schottky barrier MOS devices “Towards neuromorphic and quantum computing applications” Program

8:30 – 9:00 *“Welcome breakfast and introduction”*

9:00 – 11:00 *“Tutorial on SB-MOSFETs”*, Prof. Benjamin Iniguez (DEEEA, Universitat Rovira i Virgili) (120mins)

11:00 – 11:15 *“Coffee Break”*

11:15 – 11:40 *“Retrospective talk on SB-MOSFETs”*, Dr. John Snyder (JCap, LLC) (25mins)

11:40 – 12:05 *“Modeling SB-MOS with Silvaco Tools”*, Dr. David Green / Dr. Ahmed Nijem (Silvaco Inc.) (25mins)

12:05 – 12:30 *“Effective use of contact effect in high-gain, power-efficient thin film transistors”*, Dr. R. Sporea (Surrey) (25mins)

12:30 – 12:55 *“Graphene/Si Schottky diodes”*, Dr. Kataria Satender, Prof. Max Lemme (RWTH Aachen) (25mins)

12:45 – 13:45 *“Lunch”*

13:45 – 14:05 *“Figures of merit of nanoscale transistors at cryogenic temperature: 28nm UTBB FD SOI nMOSFET case study”*, Prof. Denis Flandre (UC Louvain)

14:05 – 14:30 *“Quantum bits using SB-MOSFETs”*, Dr. F. Nemouchi (CEA-LETI, Grenoble) (25mins)

14:30 – 14:55 *“Superconductivity”*, Dr. Francesca Chiodi (Université Paris-Sud) (25mins)

14:55 – 15:20 *“SB-MOSFETs with superconductivity”*, Dr. François Lefloch (CEA-INAC, Grenoble) (25mins)

15:20 – 16:20 *“Coffee Break and Poster Session”*

16:20 – 16:45 *“SB-MOS device modeling with applications to neuromorphic computing”*, Dr. Mike Schwarz (Robert Bosch GmbH, NanoP) (25mins)

16:45 – 17:10 *“Integrating SBMOS device modeling into neuromorphic simulation”*, Dr. Laurie E. Calvet (Université Paris-Sud) (25mins)

17:10 – 17:20 *“Closing Remarks”*