

# Program

## Monday, 14 November, 2016

17:00 – 21:00 Registration

From 18:00 *BUFFET SUPPER / Informal get together*

## Tuesday, 15 November, 2016

07:30 *BREAKFAST*

08:45 – 09:00 Elke Scheer  
Christoph Strunk  
Wolfgang Belzig

**Welcome and Opening**

09:00 – 09:45 Amir Yacoby

**A New Spin on Superconductivity**

09:45 – 10:30 Marcelo Goffman

**Andreev Quantum Dots: from one-atom contacts to nanowires**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Miguel Moreno Ugeda

**Characterization of collective ground states in single-layer NbSe<sub>2</sub>**

11:45 – 12:30 Pascal Simon

**New platforms for topological superconductivity: from Shiba to Majorana states**

12:30 – 12:40 **Conference Photo** (in the front of the lecture hall)

12:40 *LUNCH*

# Program

**Tuesday, 15 November, 2016**

- 14:00 – 14:45 Leonid Glazman **Coulomb Blockade of Electron Transport through a Proximitized Nanowire**
- 14:45 – 15:10 Nicola Paradiso **Anomalous reentrant superconductivity in a thin NbSe<sub>2</sub> crystal**
- 15:10 – 15:40 *COFFEE BREAK*
- 15:40 – 16:25 Francesca Chiodi **Superconducting Silicon devices**
- 16:25 – 16:50 Irina Bobkova **Magnetoelectrics in superconducting heterostructures with topological insulators and spin-orbit materials**
- 16:50 – 17:05 Stefan Jorda **About the Wilhelm und Else Heraeus-Stiftung**
- 17:05 – 19:00 **Poster I**
- 19:00 *HERAEUS DINNER*  
*(social event with cold & warm buffet with complimentary drinks)*

# Program

**Wednesday, 16 November, 2016**

08:00            *BREAKFAST*

09:00 – 09:45   Jochen Mannhart            **Tunnel Spectroscopy of  
Superconducting Interfaces**

09:45 – 10:30   Annica Black-Schaffer        **Quantum Ground State Control in  
Superconductor- Silicene Structures:  
0- $\pi$  transitions,  $\phi_0$ -junctions, and  
Majorana bound states**

10:30 – 11:00   *COFFEE BREAK*

11:00 – 11:35   Mikael Fogelström            **Spontaneously broken time-reversal  
symmetry in d-wave superconductors**

11:35 – 12:30   Manfred Sigrist                **Features of the topological  
superconductivity in eutectic samples  
of Sr<sub>2</sub>RuO<sub>4</sub>**

12:30            *LUNCH*

14:00 – 14:45   Sophie Guéron                **Ballistic edge states in bismuth  
nanowires revealed by SQUID  
interferometry**

14:45 - 15:10   Kaveh Lahabi                **Quantum interference of spin-  
polarised supercurrents in a  
ferromagnetic disk**

15:10 – 15:40   *COFFEE BREAK*

15:40 – 16:25   Christoph Bruder            **Snake states in graphene**

16:25 – 16:50   Teun Klapwijk               **Resistivity of a mesoscopic  
superconductor**

# Program

**Wednesday, 16 November, 2016**

16:50 – 17:15 Herve Courtois **Interplay between electron overheating and ac Josephson effect**

17:15 – 19:00 **Free time for discussion**

19:00 *DINNER*

20:00 Jean-Philippe Brantut **Mesoscopic transport experiments with cold atoms**

# Program

**Thursday, 17 November, 2016**

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Katharina Franke	<b>From single magnetic adatoms on superconductors to coupled spin chains</b>
9:45 – 10:30	Dimitri Roditchev	<b>Coherent quantum phenomena in superconducting atomic monolayers Pb/Si(111): A STM study</b>
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Jesper Nygård	<b>Tuning sub-gap states in hybrid single and double quantum dots based on nanowires</b>
11:45 – 12:30	Silvano De Franceschi	<b>Competing energy scales in hybrid superconductor-semiconductor nanowire devices</b>
12:30	<i>LUNCH</i>	
14:00 – 14:45	Bertrand Reulet	<b>Dynamical Voltage-Current Characteristics of Superconductor / Normal Metal / Superconductor Junctions</b>
14:45 – 15:10	Pascal Stadler	<b>Ground-state cooling of a mechanical oscillator by interference in Andreev reflection</b>
15:10 – 15:40	<i>COFFEE BREAK</i>	
15:40 – 16:25	Thierry Martin	<b>Topological superconductor beam splitter</b>
16:25 – 17:00	Tokuro Hata	<b>Shot noise of a superconductor/nanotube junction in the SU(2) and SU (4) Kondo regime</b>
17:00 – 19:00	<b>Poster II</b>	
19:00	<i>DINNER</i>	

# Program

**Friday, 18 November, 2016**

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Detlef Beckmann	<b>Coupled spin and heat transport in mesoscopic superconductors</b>
9:45 – 10:30	Angelo Di Bernardo	<b>Unconventional superconducting states at superconductor interfaces</b>
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Marco Aprili	<b>Spin Imbalance, Relaxation and Distribution in a Mesoscopic Superconductor</b>
11:45 – 12:30	Matthias Eschrig	<b>Spin-polarized Superconductivity</b>
12:30 – 12:40	Elke Scheer Christoph Strunk Wolfgang Belzig	<b>Concluding remarks and Poster awards</b>
12:40	<i>LUNCH</i>	

***End of the seminar and Farewell Coffee / Departure***