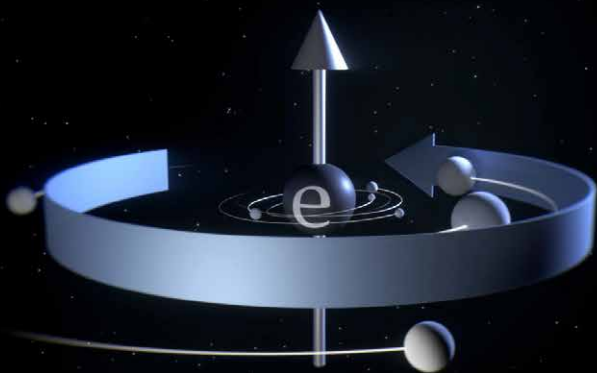


**QUANTUM  
SPINTRONICS 2022**  
INTERNATIONAL CONFERENCE  
JUNE 13<sup>TH</sup> - 15<sup>TH</sup>



Qu·  
Spin

# WELCOME TO QUANTUM SPINTRONICS 2022

## CONFERENCE CENTER

Trondheim Spektrum, Klostergata 90, Trondheim

## HOTEL ACCOMMODATION

Hotel Scandic Nidelven, Havnegata 4, Trondheim

## GUIDED BOAT TRIP AND CONFERENCE DINNER

Boat from Ravnkloa via Nidelva to dinner at  
Munkholmen Island, Trondheim

## QUSPIN CENTER

Realfagbygget, E5, Høgskoleringen 5, Trondheim

[REGISTER HERE](#)



SCANDIC NIDELVEN



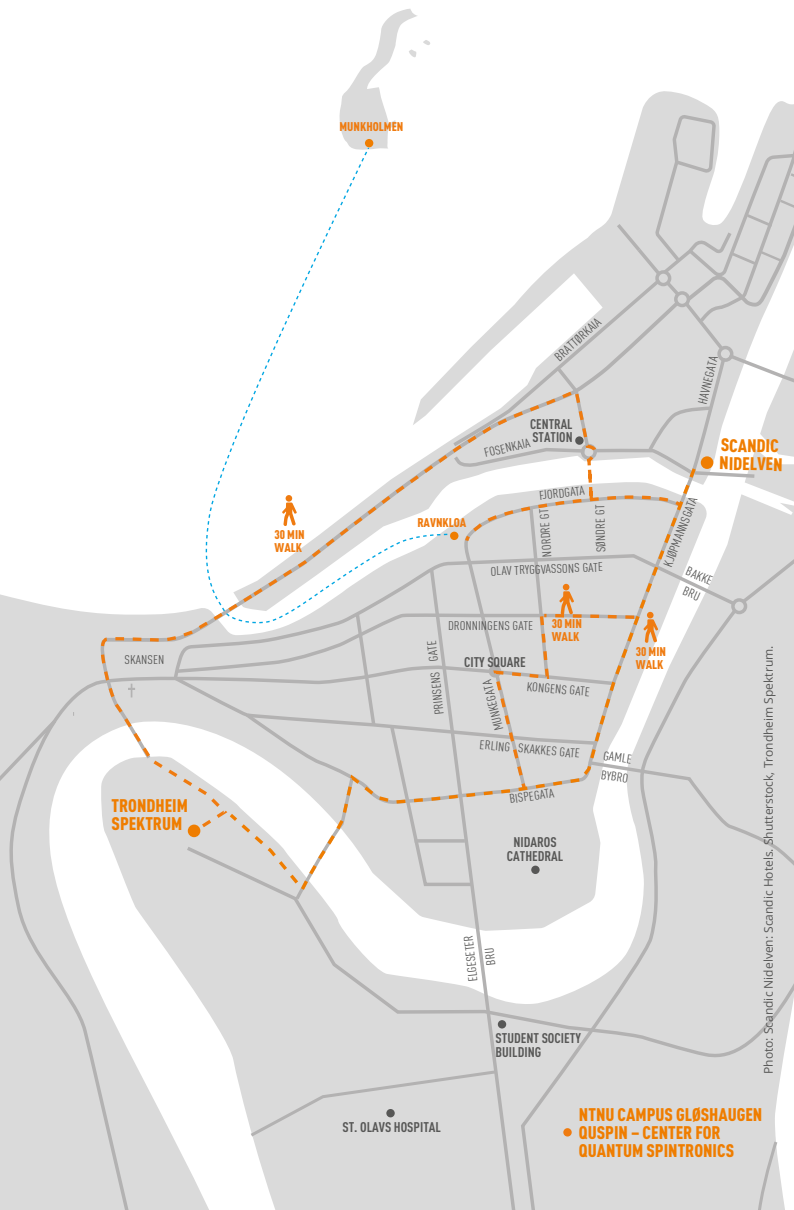
TRONDHEIM SPEKTRUM



MUNKHOLMEN



QUSPIN CENTER



MUNKHOLMEN

30 MIN WALK

RAVNKLOA

CENTRAL STATION

SCANDIC NIDELVEN

TRONDHEIM SPEKTRUM

CITY SQUARE

30 MIN WALK

30 MIN WALK

NIDAROS CATHEDRAL

ST. OLAVS HOSPITAL

NTNU CAMPUS GLØSHAUGEN  
• QUSPIN - CENTER FOR QUANTUM SPINTRONICS

Photo: Scandic Nidelven; Scandic Hotels; Shutterstock, Trondheim Spektrum.

# MONDAY

## JUNE 13<sup>TH</sup>

**08.30 - 09.00**

Registration and morning coffee

**09.00 - 09.05**

Arne Brataas, Center Director, QuSpin

*Opening remarks*

**TALKS WITH 30-MINUTES PRESENTATIONS  
AND 15-MINUTES Q&A FROM THE CONFERENCE  
PANEL AND AUDIENCE**

*Host morning session Arne Brataas, QuSpin*

**09.05 - 09.50**

Andrew Kent (New York University, USA)

*Spin-Orbit Torques in Antiferromagnet Insulator/Heavy Metal  
Heterostructures*

**09.50 - 10.05**

Break

**10.05 - 10.50**

Kaveh Lahabi (Leiden University, the Netherlands)

*Emergence of triplet rim currents in spin-textured Josephson junctions*

**10.50 - 11.05**

Break

**11.05 - 11.50**

**Manuel Bibes (CNRS Thales, France)**

*Spin-charge interconversion and superconductivity in Rashba two-dimensional electron gases based on  $KTaO_3$*

**11.50 - 12.00**

**Break with fresh air by the river**

**12.00 - 13.00 LUNCH**

*Host afternoon session Asle Sudbø, QuSpin*

**13.00 - 13.45**

**Claudia Felser (Max Planck Institute for Chemical Physics of Solids, Germany)**

*Magnetic materials and topology*

**13.45 - 14.00**

**Break**

**14.00 - 14.45**

**Jeroen van den Brink (IFW Leibnitz Institute, Germany)**

*How surfaces Berry-curve Bloch-electrons*

**14.45 - 15.00**

**Break**

**15.00 - 16.00 POSTER SESSION**

# TUESDAY

## JUNE 14<sup>TH</sup>

**08.30 - 09.00**

Morning coffee

*Host morning session Jacob Linder, QuSpin*

**09.00 - 09.45**

**Alex Khajetoorians (Radboud University, the Netherlands)**

*What can we learn from atoms?*

**09.45 - 10.00**

Break

**10.00 - 10.45**

**Tero Heikkilä (University of Jyväskylä, Finland)**

*Dynamics of ferromagnets in proximity to superconductors:  
roles of spin supercurrent and Higgs mode*

**10.45 - 11.00**

Break

**11.00 - 11.45**

**Jean-Marc Triscone (Université de Genève, Switzerland)**

*Tunable superconductivity and spin-orbit coupling at oxide interfaces*

**11.45 - 12.00**

Break with fresh air by the river

**12.00 - 13.00 LUNCH**

*Host afternoon session Arne Brataas, QuSpin*

## **13.00 - 14.00 POSTER SESSION**

**14.00 - 14.45**

**Sangetaa Sharma (Max Born institute, Germany)**

*Ultrafast spin, charge and nuclear dynamics: ab-initio description*

**14.45 - 15.00**

Break

**15.00 - 15.45**

**Asle Sudbø (QuSpin, NTNU, Norway)**

*Deconfined Quantum Criticality in low dimensional quantum antiferromagnets*

**15.45 - 16.00**

Break

## **16.00 - 16.45 GROUP PHOTO SESSION**

**16.45- 17.45**

Break

**17.45 - 18.15**

Walk to Ravnkloa and boat departure for sightseeing

## **18.30 - 19.30 BOAT TRIP SIGHTSEENG**

Boat trip with sightseeing on Nidelva, and arrival at Munkholmen Island

## **19.30 - 21.30 CONFERENCE DINNER**

At Munkholmen Island

**21.45**

Departure from Munkholmen Island with arrival at Ravnkloa

# WEDNESDAY

## JUNE 15<sup>TH</sup>

**08.30 - 09.00**

Morning coffee

*Host morning session Asle Sudbø, QuSpin*

**09.00 - 09.45**

Ewelina Hankiewicz (University of Wurzburg, Germany)

*TBA*

**09.45 - 10.00**

Break

**10.00 - 10.45**

Andrii Chumak (University of Vienna, Austria)

*TBA*

**10.45 - 11.00**

Break

**11.00 - 11.45**

Stuart Parkin (Max Planck Institute, Halle, Germany)

*TBA*

**11.45 - 12.00**

Break with fresh air by the river



## 12.00 - 13.00 LUNCH

*Host afternoon session Jacob Linder, QuSpin*

### 13.00 - 13.45

**Sol H. Jacobsen (QuSpin, NTNU, Norway)**

*Twists and turns in superconducting spintronics: how curvature expands the horizon*

### 13.45 - 14.00

Break

### 14.00 - 14.45

**Dr. Hendrik Bentmann (University of Würzburg, Germany)**

*Lifting and enforcing topological band degeneracies: an ARPES view*

## 14.45 - 14.55 ANNOUNCEMENT OF BEST POSTER

### 14.55 - 15.00

**Arne Brataas, QuSpin**

*Closing remarks.*

*Next year's Quantum Spintronics June 2023*

*The program may be subject to change*

[REGISTER HERE](#)

**ORGANISED BY THE CENTER FOR QUANTUM  
SPINTRONICS (QUSPIN)**

By Arne Brataas, Asle Sudbø, Jacob Linder and  
Karen-Elisabeth Sødahl

**CONTACT INFO:**

karen-elisabeth.sodahl@ntnu.no

Cell: + 47 918 87 782

**WWW.NTNU.EDU/QUSPIN**

Realfagbygget, E5, Høgskoleringen 5, Trondheim

