



With the support of the **Quantum Support Action** financed by the European Commission

European Quantum Technologies Conference

EQTC 2019

Registration and abstract submission are opened Link to EQTC website

Grenoble, France February 18-22, 2019

EQTC 2019 is the 1st international conference of the European Quantum Flagship, providing a full coverage of European and International advances in quantum technologies.

a full update on the European Flagship momentum, strategies and opportunities including reports from the Strategic Research Agenda, Innovation, Gender, and Education Working Groups of the Quantum Flagship.

Engage on discussions on the Strategic Research Agenda of each pillar of the Flagship (computing, communication, sensing and metrology, communication, basic science and cross cutting topics, and the Innovation strategy in specific sessions.

Meet key partners and actors of the QT community at the exhibition booths

the European and International academic and industrial QT communities

Benefit from specific sessions such as standardization, quantum challenges for aerospace or international cooperation.

New! Join the **Education Workshop on Feb. 19-20**. Participation is included in the normal EQTC registration (with specific notification, see later), or can be secured through a specific registration limited to the education event.

New ! See the detailed programme, here enclosed, and plan your participation to the scientific sessions and to the discussion around the Flagship Strategic Research agenda

Schedule:Abstract submission closingon Jan. 25th (extended deadline, for posters only)on Feb. 11th, specifically for the Education Workshop

Useful information:



Registration cost: 350 € VAT excl. (420 € VAT incl.) Registration is opened from Dec. 4th, 2018.

Registration includes full access to the plenary and parallel policy and scientific sessions, the five lunches from Monday to Friday, welcome buffet on Sunday evening, and wine and cheese event on Thursday evening. Optional Gala Dinner ($60 \in VAT excl., 72 \in VAT$ incl.) will be on Tuesday evening at Grenoble World Trade Centre, at a walking distance from the conference place.

The number of participants to the conference is limited to 600. Registrations will be processed in chronological order, authors should take care to register early enough to secure their registration.

New : join the education workshop, embedded within EQTC 2019 on Tuesday and Wednesday.

Participation is included in the normal EQTC registration (with specific notification, see later) or, can be secured through a specific registration limited to the event (120 € VAT incl.)



Venue:

To reach **Maison Minatec** (more details here): Maison Minatec is in front of the tram B (green line) stop 'Cité Internationale', directly connected (5 mn) to the main Grenoble railway station and central bus station, and to Grenoble downtown (10-15 mn).

Adress: 3 Parvis Louis Néel, 38000 Grenoble. GPS coord.: Latitude : 45,1958072 – Longitude : 5,7096947

To reach **Grenoble by plane** : closest airports are <u>Lyon St Exupery airport</u> (one hour drive by bus, bus running every 30 or 60 minutes depending on time, different companies), <u>Grenoble-Alpes airport</u> (45 minutes drive by bus, Actibus company, few buses per day Sunday-Friday and several on Saturday) or <u>Geneva airport</u> (2.5 hours by bus, a few buses a day by Aerocar company, or various train connections with SNCF).

To reach **Grenoble by train**, get off at 'Grenoble Gare' (Station). Grenoble is connected to Paris (Gare de Lyon station) by direct TGV line (approx. three hours, several trains per day).

For suggestions of accomodation in Grenoble, and tourism informations: Grenoble tourist office web page.

Invited speakers to the scientific plenary sessions

Thierry Debuisschert (Thales, France)

Philippe Duluc (Atos, France)

Ross Duncan (Computer and Information Sciences, University of Strathclyde - Cambridge Quantum Computing Limited)

Markus Greiner (Department of Physics, University of Harvard)

Ronald Hanson (QuTech, Delft)

Anthony Laing (School of Physics, University of Bristol)

Thomas Monz (Institute for Experimental Physics, University of Innsbruck)

Mikko Möttönen (Aalto University)

Heike Riel (IBM Zurich)

Fabio Sciarrino (Dipartimento di Fisica, Sapienza University of Rome)

Leticia Tarruell (ICFO, Barcelona)

Maud Vinet (CEA-Leti, Grenoble)

Andreas Walraff (Quantum Device Lab, ETH Zurich)

Eva Weig (NanoMechanics Group, University of Konstanz)

Ronald de Wolf (CWI, Univ. of Amsterdam)

Hugo Zbinden (Quantum Technologies Group, University of Geneva)

Qiang Zhang (University of Science and Technology of China)

Programme

Sunday, Feb. 17th:

18:30 - 21:00 :	welcome buffet, at Maison Minatec
	advance collecting of conference badges

Monday, Feb. 18th :

08:00 :	Welcome coffee, registration
09:00 - 11:00 :	The European Quantum Flagship : presentation and discussion with the audience. With Gustav Kalbe (European Commission) – Jürgen Mlynek (chair of the Strategic Advisory Board) - Tommaso Calarco (FCO ¹ , chair of the Quantum Community Network, FZ Jülich) and Markus Wilkens (FCO, VDI)
11:00 - 11:30 :	Coffee break
11:30 - 13:00 :	Plenary - invited talks : Ross Duncan, Ronald Hanson, Thomas Monz
13:00 - 14:45 :	Lunch break (buffet) – exhibition booths and posters (1 st round)
14:45 – 16:30 :	 Plenary - the Flagship Governance Overview by Thomas Strohm (FCO, Robert Bosch GmbH), followed by presentations and discussion with the audience for the Strategic Advisory Board (SAB), chaired by Jürgen Mlynek Scientific and Engineering Board (SEB), chaired by Thierry Debuisschert (Thales) Quantum Community Network (QCN), chaired by Tommaso Calarco (FZ Julich)

16:30-18:30 : Beer event – exhibition booths and posters (1st round)

Tuesday, Feb. 19th :

08:45 – 10:15 :	Plenary - invited talks :	Qiang Zhang, Philippe Duluc	. Leticia Tarruell
10:15 – 10:45 :	Coffee break		
10:45 – 12:15 :	Innovation Working Gr and training WG, Gend [in-depth discussion of t	oup (WG), Strategic Research er WG the SRA for each Flagship pillo	entations and short reports A Agenda (SRA), WG, Education Ar, and of the Innovation strategy aboon, Wednesday and Thursday]
12:15 – 14:00 :	Lunch break (buffet) –	exhibition booths and poste	rs (1 st round)
14:00 – 15:45 :	Parallel – Oral presenta BSCC ² (Platine)	ations Computing (Auditorium)	Simulation (upper room)
15:45 – 16:15 :	Coffee Break		

¹ The Flagship Coordination Office associates the members of the current and future Coordination and Support Actions of the Flagship: Quantum Support Action (QSA), Quantum Technology Flagship Coordination and Support Action (QFLAG).

² Basic Science and Cross Cutting topics.

16:15 – 17:10 :	Parallel - Presentation of the SRA and discussion with the audience		
	Communication (room : Platine)	Computing (room : Auditorium)	
17:15 – 18:10 :	Parallel - Presentation of the SRA and discussion with the audience		
	Simulation (room : Platine)	Sensing and metrology (room : Auditorium)	
20:00 :	Gala dinner (Grenoble World Trade	e Centre) ³	

Wednesday, Feb. 20th:

08:45 – 10:45 :	Plenary - invited talks : Mikko Möttönen, Eva Weig, Heike Riel, Ronald de Wolf			
10:15 – 10:45 :	Coffee break			
10:45 – 12:15 :	Parallel : report and discussion with the audience for			
	Innovation Working Gr (Platine)	•	Education and (Auditorium)	Training Working Group
12:15 – 14:00 :	Lunch break (buffet) –	exhibition booth	s and posters (2 nd round)
14:00 - 16:00 :	Parallel – Oral presenta BSCC ⁴ (Platine)		(Auditorium)	Computing (upper room)
16:00 – 18:00 :	Beer event – exhibition booths and posters (2 nd round)			

Thursday, Feb. 21th :

08:45 – 10:15 :	Parallel – Oral presentations		
	Simulation (Platine) Communication (Auditorium) Sensing (upper room)		
10:15 - 10:45 :	Coffee break		
10:45 – 12:15 :	Parallel – Oral presentationsSensing (Platine)BSCC (Auditorium)Communication (upper room)		
12:15 - 14:00 :	Lunch break (buffet) – exhibition booths and posters (2 nd round)		
14:00 – 15:30 :	Plenary - invited talks : Maud Vinet, Markus Greiner, Hugo Zbinden		
15:30 - 16:00 :	Coffee break		
16:00 – 17:15 :	Parallel sessions		
	Standardization for quantum technologies : how to prepare your innovation for industry (upper room) with Andreas Jenet ¹ , Adam M Lewis ¹ , Christian Goroncy ² , Samira Nik ³ , Fabio Taucer ¹ , Christian Trefzger ⁴ , Luc Van den Berghe ³ from ¹ European Commission JRC, ² Deutsches Institut für Normung (DIN), ³ CEN-CENELEC and ⁴ European Commission DG Connect		
	Applications and challenges for quantum technologies in aerospace technologies (Auditorium) Programme being defined		

 ³ Take care to book the Gala dinner when registering online.
 ⁴ Basic Science and Cross Cutting topics

17:20 – 18:35 :	Parallel sessions
	Strategic Research Agenda for Basic Science and Cross Cutting topics (Platine) report and discussion with the audience
	International cooperation for quantum technologies (Auditorium) Chaired by Philippe Chomaz (FCO, CEA)
18:45 – 21:00 :	Wine and cheese event (dinner) ⁵
	Sponsored by <u>BlueFors Cryogenics</u>

Friday, Feb. 22nd :

08:45 – 10:30 :	Parallel – Oral presentations			
	BSCC (Platine)	Computing (Auditorium)	Sensing (upper room)	
10:30 - 11:00 :	Coffee break			
11:00 - 13:00 :	Plenary - invited ta Debuisschert	ilks : Anthony Laing, Fabio Sciarri	no, Andreas Walraff, Thierry	
13:00 – 13:30 :	Next events of the	Quantum Flagship, farewell		
13:30 - 15:00 :	Lunch (take-away d	or on site)		

⁵ Opened to all participants registered to EQTC.

Education and training in quantum technologies workshop

Embedded within the conference, this specific event focuses on the education and training issues associated with the quantum technologies.

Specific registration, giving access to the full **Education and training on quantum technologies workshop** is opened on the website (120 € VAT incl.) of the registration site.

Participants registered to the full EQTC conference and willing to attend (at no additional cost) the specific **education and training workshop** on Tuesday and Wednesday should contact <u>eqtc19@sciencesconf.org</u> to be registered to the **Education workshop**.

Abstract submission deadline in EQTC-Education Section: February 11th, 2019

Programme :

Tuesday, Feb. 19 th	
10:45 - 12:15	Plenary EQTC : Innovation WG, strategic research agenda WW, education and training WG, gender WG
12:15 - 14:00	Lunch (buffet)
14:00 - 16:00	1 st education session, Chrome 2
16:00 - 17:30	Coffee break, posters
17:30-18:30	2 nd education session, Chrome 2
Wednesday, Feb. 20 th	
8:45 - 10:45	3 rd education session, Chrome 2
10:45 - 11:15	Coffee break
11:15 – 12:30	4 th education session, Chrome 2
12:30-14:15	Lunch (buffet)
14:15	End of the Education and Training Workshop

Organizing board :Hervé Courtois, Grenoble Alpes UniversityMarisa Michelini, University of UdineOxana Mishina – chair, Trieste University and Technische Universität BraunschweigRainer Müller, Technische Universität BraunschweigFrank Wilhelm-Mauch, Saarland University

Quantum Technologies with Ultra-Cold Atoms (AtomQT)

AtomQT - a COST (European Cooperation in Science and Technology) action – will held a meeting in the frame of EQTC 2019.

Contact : <u>Philippe Bouyer</u>, Insitut d'Optique Graduate School

Exhibition and sponsors

Confirmed exhibitor booths at EQTC 2019 include

BlueFors Cryogenics *Also wine and cheese dinner sponsor*

European Patent Office

Grenoble Quantum Engineering

IOP Publising

Oxford Instruments Nanoscience

M Squared Lasers Ltd.

QDevil ApS

QZabre LLC



IOP Publishing





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EQTC scientific Committee

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Atos, France Faculty of Physics and Mathematics, University of Latvia Institut Néel, CNRS & Univ. Grenoble Alpes University of Leeds **CNRS & Sorbonne University, Paris** Thales, France Nanophysics Group, ETH Zurich SPEC, CEA Saclay Quantum Optics Group, ETH Zurich IQOQI, University of Innsbruck IBM Zurich, Switzerland Inac/Pheligs, CEA & Univ. Grenoble Alpes Quantum Dynamics and Control Group, University of Kassel Quantum Optics Theory, ICFO (Barcelona) Dipartimento di Fisica - Università di Pavia Heisenberg Quantum Simulations, Germany Low Temperature Laboratory, Aalto University LORIA, CNRS Laboratoire d'Information Quantique, Université Libre de Bruxelles Department of Physics, University of Stockholm Institute for experimental quantum metrology, PTB & University of Hannover QUANTUM, Johannes Gutenberg Univ. Mainz QuTech, TU Delft and TNO

EQTC organizing Committee

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EQTC 2019 is organized in the context of the European Quantum Flagship, with the support of the **Quantum Support Action**, a coordination action financed by the European Commission.

Find last news on the quantum Flagship at <u>qt.eu</u> Find EQTC 2019 website at <u>https://eqtc19.sciencesconf.org/</u>