

## Program & Information

# 10<sup>th</sup> Joint European Magnetic Symposia

26-30 August 2019

Uppsala Konsert & Kongress, Uppsala, Sweden



@jems2019

# General information

## Venue

The technical sessions of the JEMS 2019 will take place at the Uppsala *Konsert & Kongress* (UKK), which is located at Vaksala Torg 1, 75331 Uppsala. UKK opened in 2007 and has become one of the most attractive meeting and convention centers in northern Europe.

The conference dinner will take place in the beautiful Castle of Uppsala. The building of the castle was initiated by the Swedish King Gustav Vasa in the 16<sup>th</sup> century. Today it is used as a museum and for special occasions such as for the graduation dinner ceremony of Uppsala University.

## Registration desk

The registration desk can be found at level 2 (street level) of UKK. Note on Sunday the registration is at the Universitetshuset (see map on page 15). The opening hours are as follows:

Sunday, August 25 <sup>th</sup>	16:30h – 18:30h
Monday, August 26 <sup>th</sup>	07:30h – 16:30h
Tuesday, August 27 <sup>th</sup> – Friday, August 30 <sup>th</sup>	07:45h – 10:15h

## Onsite payment

Onsite payment is possible by card during the opening hours of the registration.

## Badge policy

All attendees of JEMS2019 are kindly requested to wear their name badges to be able to enter the technical sessions and attend the welcome reception.

## WIFI

There is a free WIFI at the conference venue. Network: UKK; PWD: UKK\_2019.

## Contact

[jems2019@akademikonferens.se](mailto:jems2019@akademikonferens.se). In case of emergency, e.g. last minute cancellation etc. call +46 18 6710 03 (Monday-Friday 08.00h-16.00h).

## Website

<https://jems2019.se>

## Wardrobe

There is a manned wardrobe on Monday 26<sup>th</sup> and Friday 30<sup>th</sup> but very limited space for luggage. If possible leave your luggage at the hotel.

# Welcome to Uppsala

Today Uppsala is the 4<sup>th</sup> largest city in Sweden. It was founded in 500 AD as a small harbor city at the river *Fyris*. In the 15<sup>th</sup> century, it became the home of the Swedish arch bishop and with the transfer of the diocesan town from Old Uppsala (*Gamla Uppsala*), the construction of the cathedral (*Domkyrkan*), which until today dominates the cityscape of Uppsala, started. Shortly after, in 1477, Uppsala university, the oldest university of Scandinavia, was founded. Among a number of dignitaries, the astronomer Anders Celsius, the botanist Carl Von Linné, the physicist and astronomer Anders Jonas Ångström, and the physicist and Nobel prize winner Kai Siegbahn taught in this University. Today Uppsala university has 40.000 students and more than 7.000 employees.

The newly renovated university library – *Carolina Rediviva* – is worth visiting and to see, e.g., the Silver Bible. Opposite of the *Carolina Rediviva* lies the castle (Uppsala slott) built by king Gustav Vasa. In the large hall, the *Rikssalen*, where the Swedish king Gustav II Adolf was coronated, the conference dinner of JEMS 2019 will take place.

We hope that you will enjoy JEMS 2019 and have a good time in Uppsala.

## Good to know

### Payment methods

The currency is Swedish Crown (SEK). It's worth noting that Sweden is heading towards a cash free country and hence, some shops and restaurants do not take cash anymore (in Swedish *ej kontant*). It's not possible to pay a bus ticket cash from the bus driver.

### In the case of an emergency

The emergency number for police, ambulance, and fire department is 112.

### Smoking policy

Smoking is not permitted in public buildings including the conference center.

### Electric voltage

The electric voltage in Sweden is 230 V and the power outlet is for type C plugs. Plugs from the UK, Ireland, Cyprus, and Malta need an adapter. For US devices, a transformer is needed.

## Public transport

Uppsala has a dense bus net. Green buses are city buses while yellow buses are regional buses, e.g. to the airport. Note that no cash payment is possible in any bus or train. For payment, a credit card is needed. Alternatively, chargeable cards can be purchased in the newspaper stores (*Pressbyrån*) or at the main station.

## Presentation information

### Oral presentation

The preferred format is 16:9 but 3:4 format can also be displayed. Speakers must test their presentation in the speaker preview room (K6, level 3). You are encouraged to bring your presentation on a USB stick and upload it to the UKK computer system beforehand. Accepted formats are power point and pdf. You might also use your own computer but must bring the needed adapters/dongles on your own.

Contributed presentations are 12 mins. followed by 3 mins. of discussion while invited talks are 25 mins. + 5 mins.

### Speaker preview room

The speakers are encouraged to test their presentation and their computer connection in the speaker preview room (K6, level 3) prior to their presentation if they plan to use their own computers. Alternatively, the speakers can upload their presentation to the UKK server and use the presentation equipment of the lecture halls.

### Poster presentation

The posters should be mounted latest in the lunch break before the poster session and removed after the session. Materials to attach the posters will be provided.

Poster areas P1-P2 are located on the 3<sup>rd</sup> level near the escalator and the windows. Poster areas P3-P6 are on the 6<sup>th</sup> level. For details, see floor map (page 6 and 7).

## Coffee breaks

Refreshments will be served during the morning break after the plenary talk session and in the afternoon break outside the lecture rooms in the designated areas on floor 3 and floor 6, see map on page 6 and 7.

## Special events

### Gender and Science

**Tue, 27<sup>th</sup> August, 13:30 – 14:30 h, room: Hall A**

**Speaker:** Tomas Brage (Lund University, Sweden)

**Title:** *What does Gender have to do with Physics?*

### Outreach session with mingling

**Tue, 27<sup>th</sup> August, 18:30 – 20:30 h, room: Hall A**

**Speaker:** Oliver Gutfleisch (TU Darmstadt, Germany)

**Title:** *The element 60 – Neodymium; from critical minerals to power-magnets for renewable energy*

**Speaker:** Adrian Rennie (Uppsala University, Sweden)

**Title:** *Using neutrons to reveal secrets of complex materials*

**Speaker:** Pascale Deen (ESS, Sweden)

**Title:** *The European Spallation Source (ESS): the world's most powerful neutron source addressing some of the most important societal challenges of our time by enabling scientific breakthroughs in research related to materials, energy, health and the environment.*

### Dominique Givord memorial session

**Wed, 28<sup>th</sup> August, 13:45 – 14:30 h, room: Hall A**

**Chair:** Nora Dempsey (CNRS Grenoble, France)

**Speaker:** Dino Fiorani (CNR- ISM, Rome, Italy)

**Title:** *Dominique Givord - contributions to the magnetism community*

**Speaker:** Michael Coey (Trinity College Dublin, Ireland)

**Title:** *Dominique Givord - a life of science*

### Forward Looking Session

**Thu, 29<sup>th</sup> August, 13:30 – 14:30 h, room: Hall A**

**Speaker:** Dipankar Das Sarma (Indian Institute of Science, Bengaluru, India)

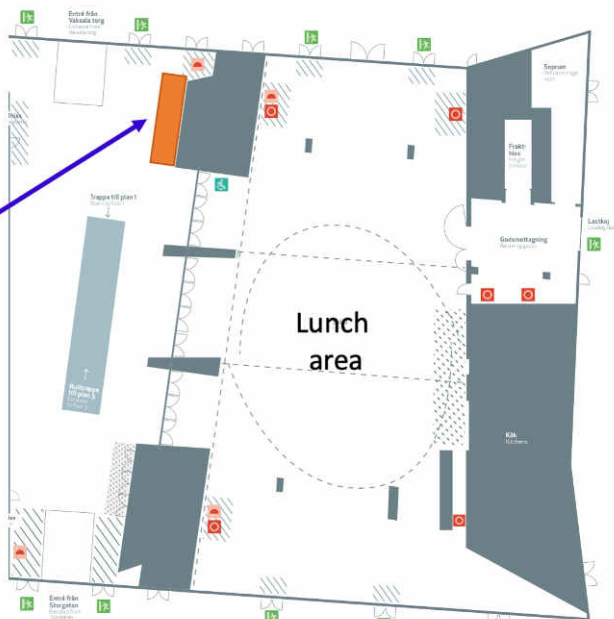
**Title:** *In search of quantum spin liquids in “non-quantum” spin systems*

# Uppsala Konsert & Kongress

## Level 2 (street level)

Registration

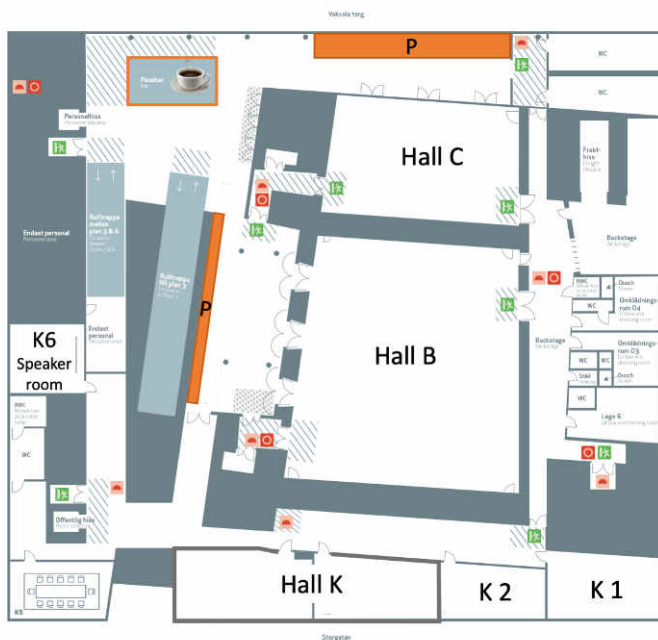
-  Nödutgång  
Emergency exit
-  Infallid brandslang / Brandsläckare  
Indoor wall fire hydrant / Fire extinguisher
-  Brandlarmsknapp  
Fire alarm
-  Rullstolsentré  
Wheelchair access







## Level 3

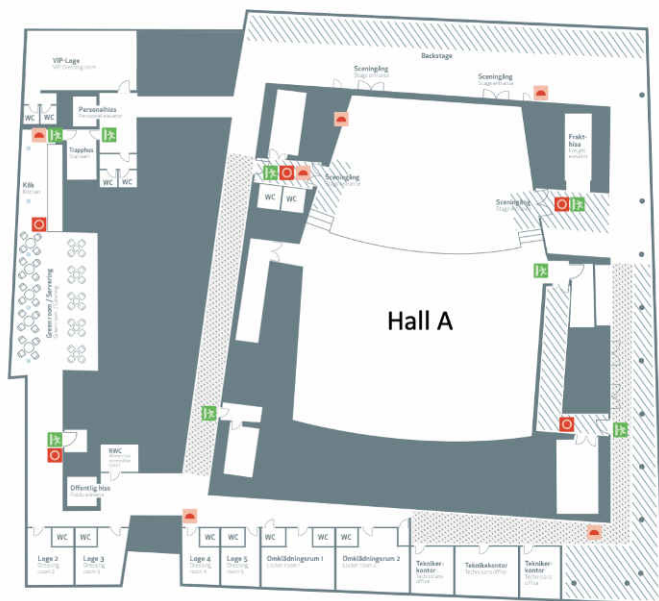
 Poster area

 Coffee/tea



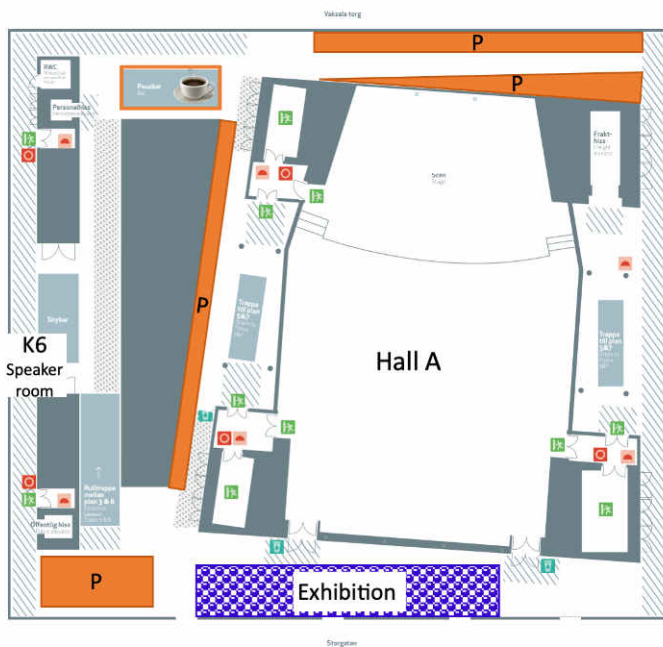
## Level 5

-  Nidutgang  
Emergency exit
-  Infilid brandslang / Brandsl ckare  
Indoor wall fire hydrant / Fire extinguisher
-  Brandlarmknapp  
Fire alarm
-  Rullstolsentr   
Wheelchair access



## Level 6

-  P Poster area
-  Exhibition
-  Coffee/tea



# Monday 26<sup>th</sup> of August

	Hall A	Hall B	Hall C	Hall K
8:00				
	Welcome			
	Plenary 1 08:30-09:15 (Nicola Spaldin)			
9:00				
	Semi-Plenary 1 09:20-10:00 (Roser Valenti)	Semi-Plenary 2 09:20-10:00 (Neil D Mathur)		
10:00	COFFEE BREAK			
	Symposium 6:1 10:30-12:30  Magnetic thin films, multilayers, surface and interfaces	Symposium 15:1 10:30-12:30  Spin waves, magnonics, ultrafast magnetization dynamics and optically driven spin excitations	Symposium 3:1 10:30-12:30  Frustrated and disordered magnetism, artificial spin ice	Symposium 1:1 10:30-12:45  Biomagnetism and medical applications
11:00				
12:00				
13:00	LUNCH BREAK			
14:00	Symposium 9:1 14:00-16:00  Materials for energy (permanent magnets, magnetocalorics and soft magnetic materials)	Symposium 16:1 14:00-16:00  Magnetotransport, spintronics, spin orbitronics and spin caloritronics	Symposium 3:2 14:00-15:00 Frustrated and disordered magnetism, artificial spin ice	Symposium 1:2 14:00-15:00 Biomagnetism and medical applications
15:00			Symposium 7:1 15:00-16:00 Magnetism in alloys and intermetallics	Symposium 13:1 15:00-16:00 Magneto-optics and magnetoplasmonics
16:00	COFFEE BREAK			
	Symposium 6:2 16:30-18:30  Magnetic thin films, multilayers, surface and interfaces	Symposium 12:1 16:30-18:30  Spin-orbit and topology driven phenomena	Symposium 7:2 16:30-18:30  Magnetism in alloys and intermetallics	Symposium 2:1 16:30-18:30  Electronic structure and strongly correlated electron systems including superconductivity
17:00				
18:00				



## Tuesday 27<sup>th</sup> of August

	Hall A	Hall B	Hall C	Hall K
8:00				
	<b>Plenary 2</b> 08:15-09:00 (Josep Nogues)			
9:00	<b>Semi-Plenary 3</b> 09:05-09:45 (Roberta Sessoli)	<b>Semi-Plenary 4</b> 09:05-09:45 (Thomas Lottermoser)		
	COFFEE BREAK			
10:00				
	<b>Symposium 9:2</b> 10:15-12:15	<b>Symposium 15:2</b> 10:15-12:15	<b>Symposium 3:3</b> 10:15-12:15	<b>Symposium 5:1</b> 10:15-12:15
11:00	Materials for energy (permanent magnets, magnetocalorics and soft magnetic materials)	Spin waves, magnonics, ultrafast magnetization dynamics and optically driven spin excitations	Frustrated and disordered magnetism, artificial spin ice	Magnetorecording media, magnetic memories and magnetic sensors
12:00				
	LUNCH BREAK			
13:00				
	<b>Gender and Science Session</b> 13:30-14:30			
14:00				
	COFFEE BREAK			
15:00	<b>Symposium 6:3</b> 15:00-17:00	<b>Symposium 16:2</b> 15:00-17:00	<b>Symposium 7:3</b> 15:00-17:00	<b>Symposium 5:2</b> 15:00-16:00
	Magnetic thin films, multilayers, surface and interfaces	Magnetotransport, spintronics, spin orbitronics and spin caloritronics	Magnetism in alloys and intermetallics	Magnetorecording media, magnetic memories, magnetic sensors
16:00				<b>Symposium 8:1</b> 16:00-17:00 Novel magnetic techniques
17:00	<b>Poster Session 1</b> <b>Symposia: S1, S5, S9, S11, S13, S14</b> 17:00-18:30 (Poster areas)			
18:00				
	<b>Outreach Session</b> 18:30-20:30			

## Wednesday 28<sup>th</sup> of August

	Hall A	Hall B	Hall C	Hall K
8:00				
	<b>Plenary 3</b> 08:15-09:00 (Silvia Picozzi)			
9:00	<b>Semi-Plenary 5</b> 09:05-09:45 (Ingrid Mertig)	<b>Semi-Plenary 6</b> 09:05-09:45 (Adekunle Adeyeye)		
10:00	COFFEE BREAK			
	<b>Symposium 9:3</b> 10:15-12:15	<b>Symposium 12:2</b> 10:15-12:15	<b>Symposium 11:1</b> 10:15-12:15	<b>Symposium 8:2</b> 10:15-12:15
11:00	Materials for energy (permanent magnets, magnetocalorics and soft magnetic materials)	Spin-orbit and topology driven phenomena	Nanomaterials, patterned films, nanoparticles and molecular magnetism	Novel magnetic techniques
12:00				
	LUNCH BREAK			
13:00				
14:00	<b>Dominique Givord memorial session</b> 13:45-14:30			
	COFFEE BREAK			
15:00	<b>Symposium 6:4</b> 15:00-17:00	<b>Symposium 15:3</b> 15:00-17:00	<b>Symposium 14:1</b> 15:00-17:00	<b>Symposium 10:1</b> 15:00-17:00
	Magnetic thin films, multilayers, surface and interfaces	Spin waves, magnonics, ultrafast magnetization dynamics and optically driven spin excitations	Multifunctional magnetic materials: magnetic shape memory materials, multi-ferroics including artificial /composite multi- ferroics, and perovskites	Micromagnetics and magnetization processes
16:00				
17:00	<b>Poster Session 2</b> <b>Symposia: S2, S6, S7, S12</b> 17:00-18:30 (Poster areas)			
18:00				

# Thursday 29<sup>th</sup> of August

	Hall A	Hall B	Hall C	Hall K
8:00				
	<b>Plenary 4</b> 08:15-09:00 (Oliver Gutfleisch)			
9:00	<b>Semi-Plenary 7</b> 09:05-09:45 (Chiara Ciccarelli)	<b>Semi-Plenary 8</b> 09:05-09:45 (Karsten Rode)		
10:00	COFFEE BREAK			
	<b>Symposium 9:4</b> 10:15-12:15	<b>Symposium 16:3</b> 10:15-12:15	<b>Symposium 11:2</b> 10:15-12:15	<b>Symposium 13:2</b> 10:15-12:15
11:00	Materials for energy (permanent magnets, magnetocalorics and soft magnetic materials)	Magnetotransport, spintronics, spin orbitronics and spin caloritronics	Nanomaterials, patterned films, nanoparticles and molecular magnetism	Magneto-optics and magnetoplasmonics
12:00				
	LUNCH BREAK			
13:00				
	<b>Forward Looking Session</b> 13:30-14:30			
14:00				
	COFFEE BREAK			
15:00	<b>Symposium 6:5</b> 15:00-17:00	<b>Symposium 12:3</b> 15:00-17:00	<b>Symposium 14:2</b> 15:00-17:00	<b>Symposium 10:2</b> 15:00-17:00
	Magnetic thin films, multilayers, surface and interfaces	Spin-orbit and topology driven phenomena	Multifunctional magnetic materials: magnetic shape memory materials, multi-ferroics including artificial/composite multiferroics, and perovskites	Micromagnetics and magnetization processes
16:00				
17:00	<b>Poster Session 3</b> <b>Symposia: S3, S4, S8, S10, S15, S16</b> 17:00-18:30 (Poster areas)			
18:00				
	CONFERENCE DINNER Start 19:00 Uppsala Castle			

# Friday 30<sup>th</sup> of August

	Hall A	Hall B	Hall C	Hall K
8:00				
	<b>Plenary 5</b> 08:15-09:00 (YoshiChika Otani)			
9:00	<b>Semi-Plenary 9</b> 09:05-09:45 (Dirk Grundler)	<b>Semi-Plenary 10</b> 09:05-09:45 (Andrei Kirilyuk)		
10:00	COFFEE BREAK			
	<b>Symposium 9:5</b> 10:15-12:15	<b>Symposium 15:4</b> 10:15-12:15	<b>Symposium 11:3</b> 10:15-12:15	<b>Symposium 2:2</b> 10:15-12:15
11:00	Materials for energy (permanent magnets, magnetocalorics and soft magnetic materials)	Spin waves, magnonics, ultrafast magnetization dynamics and optically driven spin excitations	Nanomaterials, patterned films, nanoparticles and molecular magnetism	Electronic structure and strongly correlated electron systems including superconductivity
12:00				
	LUNCH BREAK			
13:00				
	<b>Symposium 6:6</b> 13:30-15:30	<b>Symposium 16:4</b> 13:30-15:30	<b>Symposium 14:3</b> 13:30-15:30	<b>Symposium 4:1</b> 13:30-15:30
14:00	Magnetic thin films, multilayers, surface and interfaces	Magnetotransport, spintronics, spin orbitronics and spin caloritronics	Multifunctional magnetic materials: magnetic shape memory materials, multi-ferroics including artificial/composite multiferroics, and perovskites	Magnetism in carbon- based and organic materials
15:00				

## Poster sessions

Poster area (floor level)	<b>Session 1</b> August 27 <sup>th</sup> 17:00h-18:30h	<b>Session 2</b> August 28 <sup>th</sup> 17:00h-18:30h	<b>Session 3</b> August 29 <sup>th</sup> 17:00h-18:30h
Level 3	S5 / S11 / S13	S2 / S12	S8 / S15
Level 6	S1 / S9 / S14	S6 / S7	S3 / S4 / S10 /S16

## Exhibition

The science exhibition is located on level 6 (map on page 7).

Opening hours of the exhibition are

Monday, August 26<sup>th</sup> – Thursday, August 29<sup>th</sup>: 08:00h-18:30h

Friday, August 30<sup>th</sup>: 08:00h-13:30h

## List of Exhibitors



A voice for magnetism in Europe



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## Restaurants

There are many restaurants, cafés, bistros in Uppsala to have lunch or dinner. Below a few selected ones are indicated, which are close to the city center and UKK. Others are in the galleries (St: Per, Svava) and around Stora torget. Please note that a reservation is always recommended (via phone or web) for a dinner. The locations are marked on the map.

### **(A) Iberico (\*\*\*)** – (Tapas & Bar)

Fyristorg 8, phone: +46(0)18-150 531, [info@iberico.se](mailto:info@iberico.se)

### **(B) Miss Voon (\*\*\*)** – (Asian)

Suttings gränd 6, phone: +46(0)18-472 25 00, [missvoon.se](http://missvoon.se)

### **(C) Peppar peppar (\*\*\*)** – (Scandinavian)

Suttings gränd 3, phone: +46(0)18-131 360, [pepparpeppar.se](http://pepparpeppar.se)

### **(D) Pong Uppsala (\*\*-\*\*\*)** – (Asian fusion, no cash accepted)

Storgatan 27, phone: +46(0)18-102 828, [pongupsala.se](http://pongupsala.se)

### **(E) Stationen (\*\*)** – (Bar and Restaurant, European)

Olof Palmes plats 6, phone: +46(0)18-153 500, [www.stationen.se](http://www.stationen.se)

### **(F) Katalin (\*\*)** – (Food and Jazz)

Roslagsgatan 1, 753 27 Uppsala, phone: +46(0)18-140 680, [info@katalin.com](mailto:info@katalin.com)

### **(G) Amazing Thai (\*\*)** – (Asian, Thai)

Dragarbrunnsgatan 46, Uppsala, Sverige, phone: +46 (0)18-153-010, [amazingthai.se](http://amazingthai.se)

### **(H) Il Forno Italiano (\*\*)** – (Italian)

Sankt Olofsgatan 8, phone: +46(0)18-103 520, [ilfornoitaliano.se/upsala](http://ilfornoitaliano.se/upsala)

## Cafés

Typical Swedish sweets like kanelbulle (cinnamon bun), Princess tårta (cream cake), or morotskaka (carrot cake) and Swedish style sandwiches can be found in Uppsala's cafés. Close to the city center one may find e.g.

### **(I) Guntherska** – (Royal pastry)

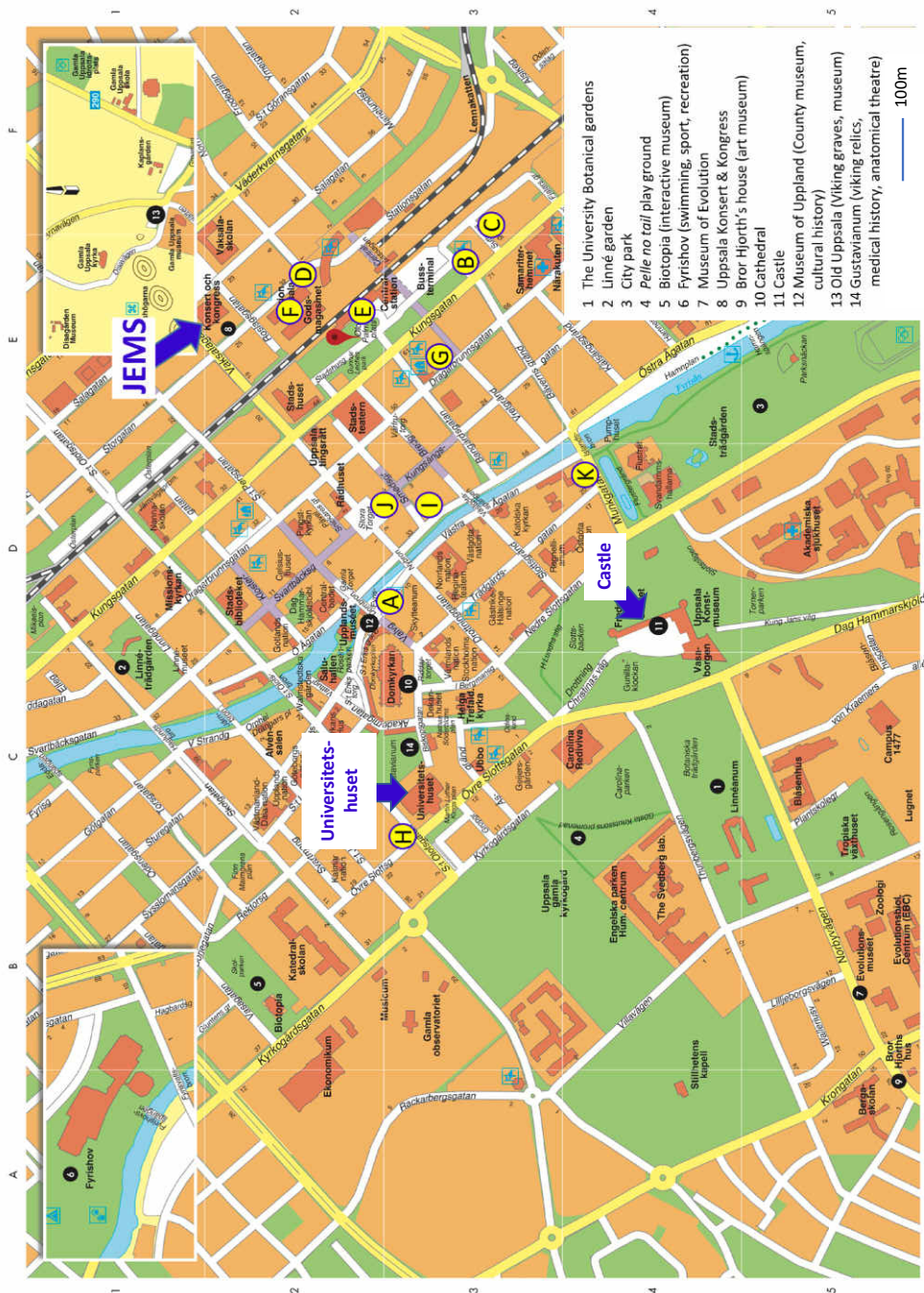
Östra Ågatan 31, [www.guntherska.se](http://www.guntherska.se)

### **(J) Storken** – (Earthy atmosphere, lunch dishes)

Stora Torget 3

### **(K) Konditori Fågelsången** -- (Located below the castle)

Munkgatan 3, [www.konditorifagelsangen.se](http://www.konditorifagelsangen.se)



# Organization

## Local Organizing Committee

**Uppsala University:** Gabriella Andersson, Heike C. Herper, Roland Mathieu (chair), Per Nordblad, Biplab Sanyal (chair), Martin Häggblad Sahlberg, Tapati Sarkar, **Stockholm University:** Matthias Hudl Waltin

## National Advisory Committee

Igor Abrikosov, Yvonne Brandt Andersson, Dimitri Arvanitis, Lars Bergqvist, Stefano Bonetti, Carlo Canali, Anna Delin, Sten Eriksson†, Maj Hanson, Patrik Henelius, Björgvin Hjörvarsson, Börje Johansson, Petra Jönsson, Vassilios Kapaklis, Olof Karis, Vladislav Korenivski, Peter Lazor, Venkata Mutta, Peter Oppeneer

## Program Committee

Franca Albertini, Oksana Chubykalo-Fesenko, Michael Coey, Nora Dempsey, Olle Eriksson, Dino Fiorani, Laura Heyderman, Burkard Hillebrands, Peter Svedlindh, (chair), Johan Åkerman

## International Advisory Committee (IAC)

João Pedro Araújo, Ekkes Brück, Oksana Chubykalo-Fesenko, Russell Cowburn, Alina Deac, Nora Dempsey, Dino Fiorani (past President), Florence Gazeau, Oliver Gutfleisch, Laura Heyderman, Tomas Jungwirth (President), Bert Koopmans, Laura Lewis, Sara Majetich, Peter Oppeneer, Yoshichika Otani, Larissa Panina

## Conference Organization and Support



Akademikonferens Uppsala



Uppsala congress center UKK

## Impressum

Title photo of UKK (H.C. Herper), skyline Uppsala (Uppsala City), Uppsala city map (Destination Uppsala – tourist office), Text: H. C. Herper.



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## Local sponsors



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## Media partner

