



CONFERENCE
BOOKLET



INTERNATIONAL CONFERENCE ON
OPERATIONS RESEARCH 2024



OR 2024

MUNICH

SEPTEMBER
3 - 6, 2024

DATA, LEARNING,
AND OPTIMIZATION



or2024.de

OR 2024
MUNICH

WELCOME



WELCOME TO THE INTERNATIONAL CONFERENCE ON OPERATIONS RESEARCH 2024

Dear OR 2024 participants,

On behalf of the Organizing Committee and the Program Committee, we welcome you to the International Conference on Operations Research 2024.

The theme of the conference is “Data, Learning, and Optimization”, which addresses the major opportunities and challenges at the intersection of Operations Research and Machine Learning. World-class researchers and industry experts will deliver exciting and inspiring plenary and semi-plenary presentations on this theme. More than 650 conference attendees will present over 500 scientific papers, organized in 23 streams, representing the richness and breadth of research in the field.

In addition to the scientific program, we have arranged interesting excursions and trips to three highlights of Munich: the BMW plant, the Spaten Brewery, and Nymphenburg Castle.

The conference will take place at the downtown campus of the Technical University of Munich in the Maxvorstadt district. Maxvorstadt is not only home to many universities and a vibrant student life, but also to an international food scene and world-class museums. Take some time to explore this exciting neighborhood.

Beyond Maxvorstadt, Munich offers many opportunities to discover great places: the English Garden with its surf spot, the Residenz Palace, or the lakes south of Munich with the Lake Starnberg just 20 minutes by train from Munich Central Station.

We wish you an interesting and inspiring conference and a wonderful stay in Munich!



Martin Grunow

Co-Chair Organizing Committee



Rainer Kolisch

Chair Organizing Committee
Co-Chair Program Committee



Stefan Minner

Chair Program Committee

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TUM School of Management



Maximilian Schiffer

TUM School of Management



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TUM School of Computation, Information and Technology



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TUM School of Computation, Information and Technology

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HOW TO GET TO OR 2024

The OR 2024 conference is set at Technical University of Munich's downtown campus at

**ARCISSTRASSE 21
80333 MUNICH**

The campus is easily accessible by public transport. The most convenient stop is Theresienstrasse on underground line U2. You may want to download **MVGO**, the public transport app for Munich:



Android



IOS



WELCOME DESK

The Welcome Desk for the conference is in the foyer of the Audimax.

The opening times for the Welcome Desk are:

Tuesday, 3.9.2024 13:00 – 21:00

Wednesday, 4.9.2024 08:00 – 18:00

Thursday, 5.9.2024 08:00 – 17:00

Friday, 6.9.2024 08:00 – 15:00

Here, you will be checked in and receive all necessary documents.

Our support team at the Welcome Desk will be available anytime during the opening hours to answer questions and help – particularly with your registration.

For any questions during the conference, you can reach our team by phone at **+49 89 289 15 261**.

On Friday, we will offer luggage storage at the Welcome Desk. Please note that bags are left at the owner's risk, as we cannot assume any liability for checked bags.

The Welcome Desk will also be the meeting point for the excursions to the BMW plant, the Spaten Brewery, and Nymphenburg Palace.

WIFI & HARDWARE

WIFI

Access to the **eduroam** network is available anywhere on campus. Please inform yourself at your home institution or via eduroam.org

Alternatively, you can use **@BayernWLAN** network free of cost. You will simply have to accept the Terms of Use before the connection works.

HARDWARE

All conference rooms are equipped with HDMI access to the projectors. Please bring your own laptop as well as an adapter if necessary.

OR2024 ON SOCIAL MEDIA

Follow OR2024 on Social Media to be informed about the conference.

You can scan the following QR codes to keep in touch.



LinkedIn



Instagram



X

DOCTORAL PROGRAM

Dokt!OR

PhD-students are invited to the Dokt!OR, a program by the GOR to promote young researchers.

Tuesday, 3.9.2024, 14:30-18:00, Room 0601

Schedule

14:30–16:00

Panel on Career Paths after a Doctorate in OR

Baturhan Bayraktar (Panel Chair), AdOne Graduate Program

16:00–16:30

Coffee break

16:30–18:00

Editors Panel on Publishing as a PhD student and Postdoc

Martin Bichler (Panel Chair), Department Editor, Management Science

Francis de Vericourt, Department Editor, Operations Research

Stefan Minner, Editor-in-Chief, International Journal of Production Economics

Oliver Stein, Editor-in-Chief, Mathematical Methods of Operations Research

Guido Voigt, Editor-in-Chief, OR Spectrum

WORKSHOPS & AWARDS

All Workshops and Award ceremonies will take place in the Audimax.

WORKSHOPS



Modeling and Solving Routing Problems with Hexaly Studio

Léa Blaise, Julien Darlay

Wednesday, 4.9.2024, 13:00-14:00



Gurobi under the hood: Solving mixed-integer nonlinear optimization problems

Robert Luce

Friday, 6.9.2024, 10:45-12:15

AWARDS



GOR Company Award

Wednesday, 4.9.2024, 11:00-12:00

GOR PhD Award

Thursday, 5.9.2024, 08:30-10:00

GOR Master Thesis Award

Thursday, 5.9.2024, 11:30-13:00

SCHEDULE

TUESDAY 3.9.2024

WEDNESDAY 4.9.2024

09:00

10:00

11:00

12:00

13:00

14:00

15:00

16:00

17:00

18:00

19:00

20:00

21:00

22:00

23:00

10

RESPECT THE RIGHT OF OUR SPEAKERS

Video recording, audio recording,
and photography of the
presentations are prohibited.

14:30–18:00
PhD-Program
Dokt!OR

18:00–21:00
Get Together
Foyer Audimax TUM

08:30–10:30
Opening and Plenary Romero

10:30–11:00 Coffee Break

11:00–12:00
Parallel Sessions

12:00–13:00
Lunch Break

13:00–14:30
Parallel Sessions

15:00–16:00
Semi-Plenaries
Kaminsky/Parmentier/Tan

16:00–16:30 Coffee Break

16:30–18:00
Parallel Sessions

19:00–22:00
Bavarian Reception
Augustiner Bräustuben

THURSDAY 5.9.2024

08:30–10:00
Parallel Sessions

10:00–10:30 Coffee Break

10:30–11:30
Plenary Klemperer

11:30–13:00
Parallel Sessions

13:00–14:00
Lunch Break

14:00–15:30
Parallel Sessions

15:30–16:00 Coffee Break

16:00–17:00
Semi-Plenaries
Goebelt/Wallace/Wiegele

17:00–18:30
GOR Annual Meeting

19:00–23:00
Conference Dinner
Weitblick Event Location

FRIDAY 6.9.2024

08:30–09:30
Parallel Sessions

09:30–09:45 Coffee Break

09:45–10:45
Semi-Plenaries
Martinez/Osorio/Papavasiliou

10:45–12:15
Parallel Sessions

12:15–13:15
Lunch Break

13:15–14:30
Closing and Plenary Bixby

DETAILED SCIENTIFIC PROGRAM

The detailed scientific program is available as PDF file on our website [or2024.de](https://www.conftool.com/or2024.de). Furthermore, it can be accessed at the link given below, where registered participants can also build their individual schedules.

[https://www.conftool.com/
or2024/sessions.php](https://www.conftool.com/or2024/sessions.php)



09:00

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23:00

PLENARIES

WEDNESDAY, 4.9.2024

PLENARY

08:30-10:30, Audimax



Dolores Romero Morales

Professor of Operations Research, Copenhagen Business School

Fairness and Transparency in AI: An OR Perspective

SEMI-PLENARIES

15:00-16:00



Phil Kaminsky

Amazon

**Freight Capacity Portfolio Design in a Two-Sided
Freight Marketplace**

Room Audimax



Axel Parmentier

Professor and Chairholder of the AI for the Air Transport Industry Research Chair,
Ecole des Ponts Paristech

**Recent Trends in Combinatorial Optimization
Augmented Machine Learning**

Room Theresianum 0602



Tarkan Tan

Professor and Chairholder of the Chair of Sustainable Operations Management,
University of Zürich

**Collaborate for Good: Orchestrating Sustainability
in Supply Chains**

Room Theresianum 0606

THURSDAY, 5.9.2024

PLENARY

10:30-11:30, Audimax



Paul Klempner

Edgeworth Professor of Economics, University of Oxford, Great Britain

Multiproduct Auction Design

SEMI-PLENARIES

16:00-17:00



Mathias Goebelt

SAP

SAP Supply Chain Optimization: Optimization Methods and Future Usage of Artificial Intelligence for real-world business problems

Room Audimax



Stein W. Wallace

Professor of Operational Research and Leader of the Centre for Shipping and Logistics, NHH Bergen

Modeling with Stochastic Programming

Room Theresianum 0602



Angelika Wiegele

Professor of Mathematics, University of Klagenfurt

SDP-Based Computational Strategies for Combinatorial Optimization

Room Theresianum 0606

PLENARIES

FRIDAY, 6.9.2024

PLENARY

13:15-14:30, Audimax



Robert Bixby

Advisor and Co-founder Gurobi

History of Computational Progress in LP and MIP

SEMI-PLENARIES

09:45-10:45



Victor Martínez de Albéniz

Professor of Operations, Information and Technology, IESE Business School

Experience Analytics: An Operations Management View

Room Audimax



Carolina Osorio

Professor and Chairholder of the Scale AI Research Chair in Artificial Intelligence for Urban Mobility and Logistics, HEC Montreal, Google Research

**Urban Transportation Simulation and Optimization:
Large-Scale Network Modeling meets Machine Learning**

Room Theresianum 0602



Anthony Papavasiliou

Assistant Professor, Technical University of Athens, Greece

**Co-Optimization of Energy and Reserves in European
Energy Markets**

Room Theresianum 0606

STREAM OVERVIEW

Stream	Stream Numbers	Rooms
Building: Theresianum		
Analytics and Data	03	0606
AI, ML, and Optimization	02	0602, 0606
Applications in Management, Engineering and the Sciences	14	2607
Decision Theory and MCDM	12	2601
Energy, Finance, and Sustainability	18 - 20	0601, 0670 ZG, 1601
Game Theory, Behavior, and Mathematical Economics	11	2609
Software for OR	13	2605
Building: Nordgebäude		
Mobility, Transport, and Traffic	21 - 23	N1070, N1080, N1090
Building: Wirtschaftswissenschaften		
Continuous and Global Optimization	08	Z538
Discrete and Combinatorial Optimization	06 - 07	Z534, Z536
Pricing and Revenue Management	09	Z532
SCM, Production, and Scheduling	15 - 17	0534, 0540, 0544
Service Operations and Healthcare	10	0514
Building: Wienandsbau		
Optimization under Uncertainty	04 - 05	2999, 3999

EVENING PROGRAM

GET TOGETHER

On the evening before the conference, we invite all participants to pretzels and beer in the foyer of the TUM Audimax. Meet old friends and make new friends.

Tuesday, 3.9.2024, 18:00 - 21:00, Foyer Audimax TUM



BAVARIAN RECEPTION

Dive into Oktoberfest feeling. On the first evening of the conference, we welcome everybody to join us for a Bavarian reception in the Augustiner Bräustuben. Founded in 1328, Augustiner is the oldest brewery in Munich. Accompanied by a traditional Bavarian band, you can enjoy freshly tapped “Helles”, the Bavarian Lager, and a “Schmankerlbrett!”, the famous plate with local delicacies. As the innkeeper couple of the Bräustuben states “Bei uns hierin ist es wie auf der Wiesn und manchmal noch schöner”, here it is like at the Oktoberfest and sometimes even better.



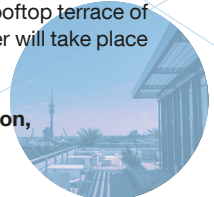
Wednesday, 4.9.2024, 19:00 - 22:00, Augustiner Bräustuben, Landsberger Straße 19, 80339 München

CONFERENCE DINNER

Have a stunning view on the Olympic Games 1972 site, Munich, and the Alps. The conference dinner starts with a reception on the rooftop terrace of the “Weitblick”. After you have enjoyed the sunset, the dinner will take place in the “Market”, a great urban place.




Thursday, 5.9.2024, 19:00 - 23:00, Weitblick Event Location, Sapporobogen 6-8, 80637 München



EXCURSIONS

All excursions will start in front of the Audimax and the group will travel to the venue by public transport. Please keep a valid ticket ready beforehand.

BMW PLANT



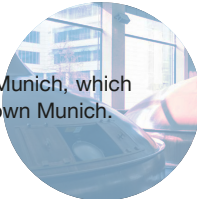
Integrated into BMW's global production network, the plant produces approximately 900 cars per day. The tour will provide a first-hand experience of state-of-the-art automotive manufacturing.

Tour 1: Wednesday, 4.9.2024, 11:15 – 15:30

Tour 2: Wednesday, 4.9.2024, 13:00 – 17:15

SPATEN BREWERY

Dating back to 1397, Spaten is one of the beers brewed in Munich, which is served at the Oktoberfest. Its brewery location is in downtown Munich.



Tour 1: Tuesday, 3.9.2024, 15:30 – 18:00

Tour 2: Thursday, 5.9.2024, 14:30 – 17:30

NYPHENBURG PALACE

Nymphenburg Palace is a heritage landmark in the Neuhausen-Nymphenburg district of the Bavarian capital of Munich. It was the summer residence of the electors and kings of Bavaria from the Wittelsbach dynasty from 1715 to 1918.



Tour 1: Tuesday, 3.9.2024, 15:00 – 18:00

Tour 2: Thursday, 5.9.2024, 15:00 – 18:00

N I

Nordgebäude
N1070, N1080, N1090

A

Audimax

A

Audimax Foyer
Welcome Desk, Exhibition, Tea and Coffee

1

Lunch

5

Wirtschaftswissenschaften 0514, 0534,
0540, 0544, Z532, Z534, Z536, Z538, 2566

6

Theresianum 0601, 0602, 0606, 0670ZG,
1601, 2601, 2605, 2607, 2609

9

Wienandsbau
2999, 3999

21

Main Entrance (Arcisstraße 21)

ROOM PLAN

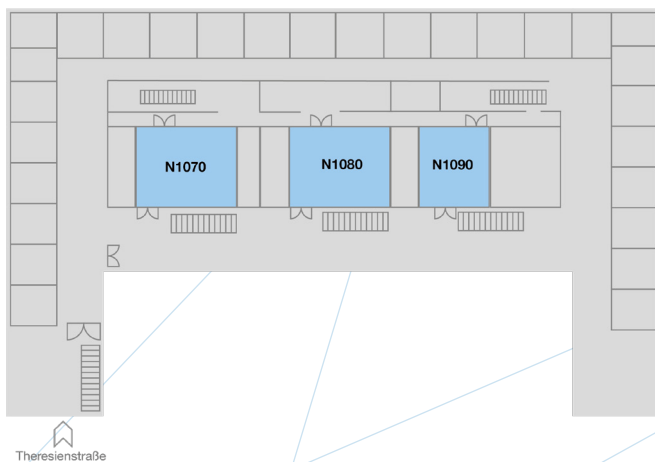
For an interactive room plan, please also use our **roomfinder**:

www.nav.tum.de

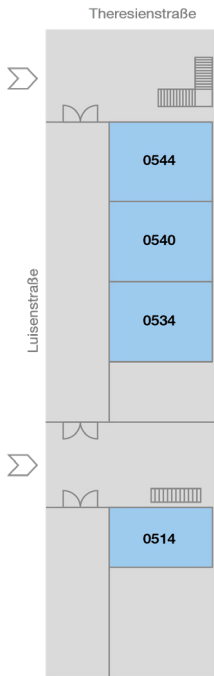


NORDGEBÄUDE

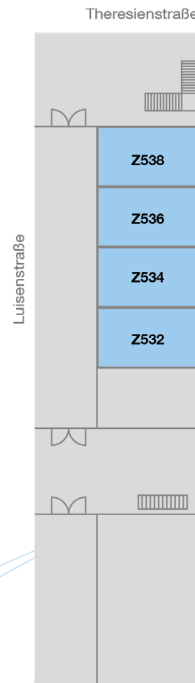
MEZZANINE LEVEL (ZWISCHENGESCHOSS ZG)



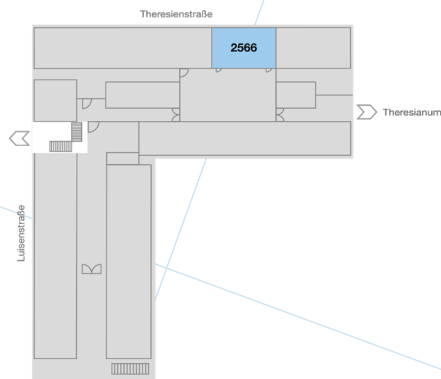
**GROUND FLOOR
(ERDGESCHOSS EG)**



**MEZZANINE LEVEL
(ZWISCHENGESCHOSS ZG)**



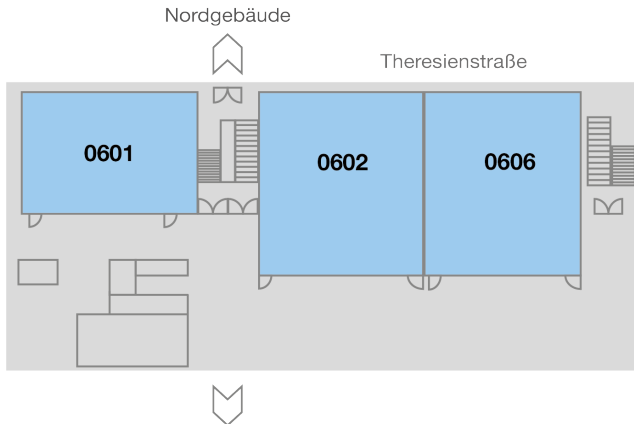
SECOND FLOOR (2. OG)



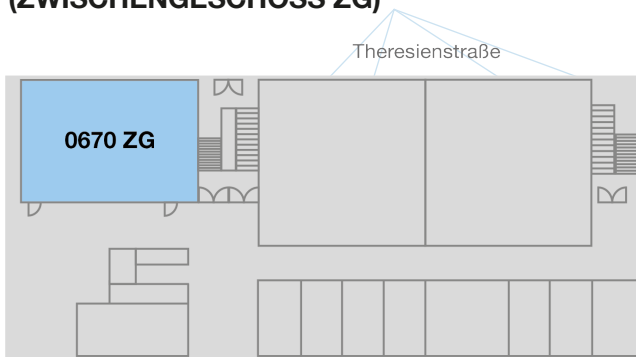
ROOM PLAN

THERSIANUM

GROUND FLOOR (ERDGESCHOSS EG)

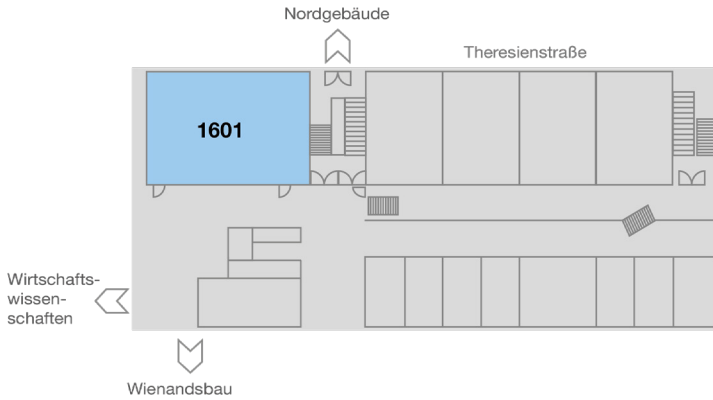


MEZZANINE LEVEL (ZWISCHENGESCHOSS ZG)

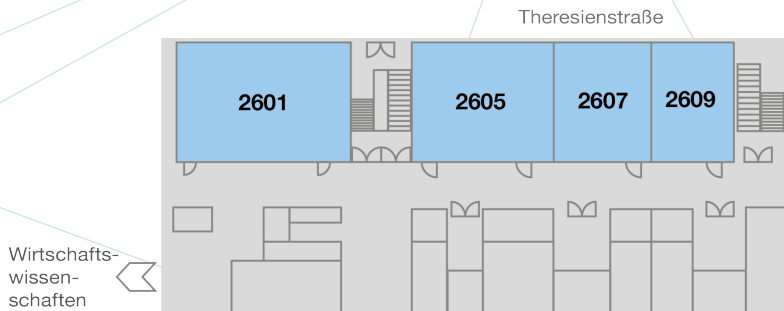


ThERESIANUM

FIRST FLOOR (1. OG)



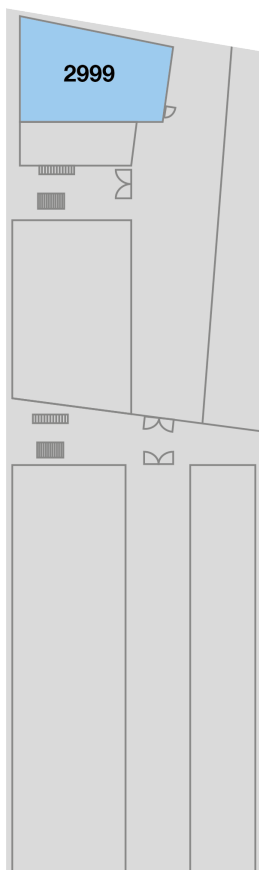
SECOND FLOOR (2. OG)



ROOM PLAN

WIENANDSBAU

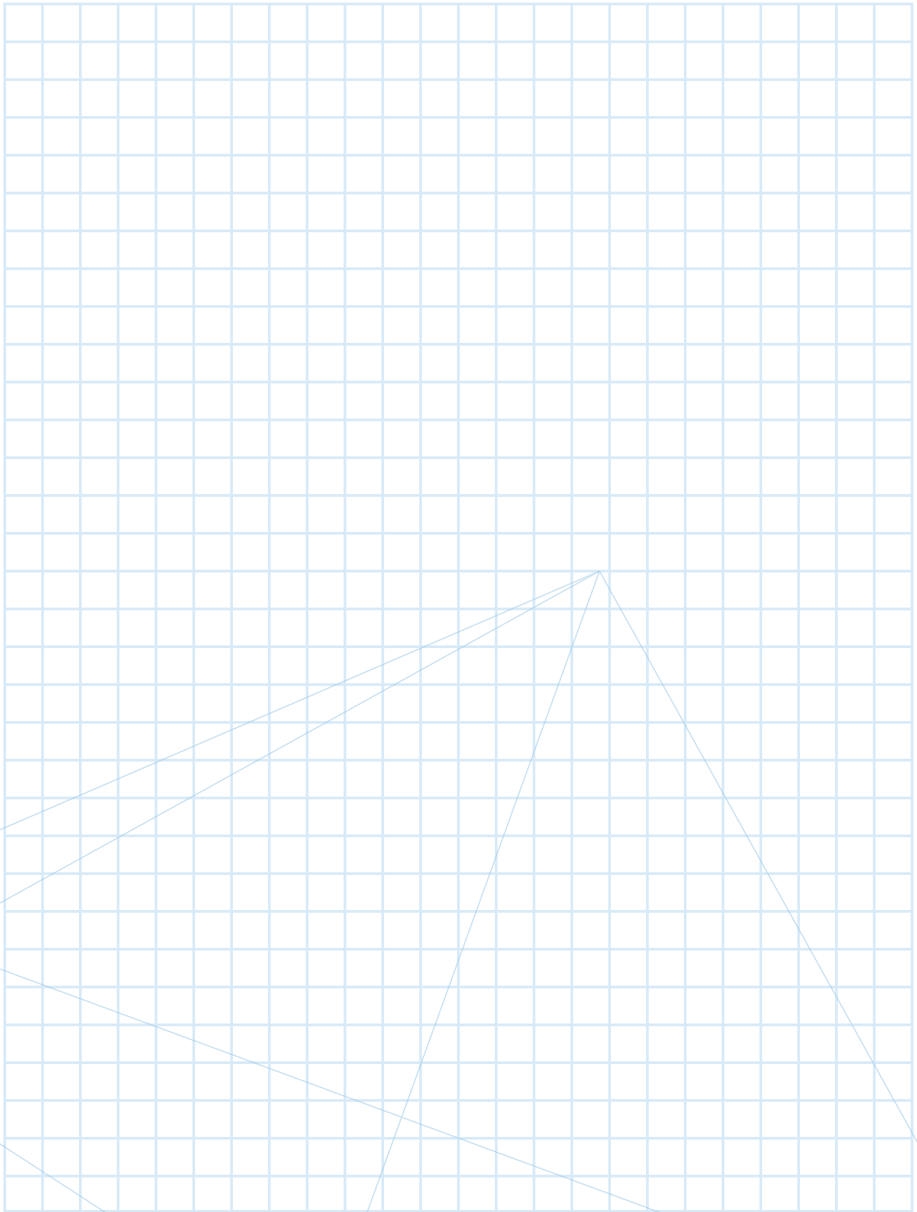
SECOND FLOOR (2. OG)



THIRD FLOOR (3. OG)



NOTES



MUNICH MAXVORSTADT



Maxvorstadt is home to several universities, including the Ludwig-Maximilians-Universität and the Technical University of Munich. The area's vibrant student life contributes to its dynamic and energetic atmosphere. As night falls, Maxvorstadt transforms into a lively area with many opportunities to meet, drink, eat, and socialize.

Adding to Maxvorstadt's charm is its international food scene. With hundreds of restaurants and street vendors, the district offers a culinary journey around the globe. Many restaurants offer outdoor seating, known as "Schanigarten," providing the perfect setting for enjoying meals on the streets of Munich.

We invite you to explore Maxvorstadt's rich arts, dynamic student life, and diverse international food scene, all conveniently located near the OR 2024 conference venue.



Scan here & explore the culinary diversity
of Maxvorstadt

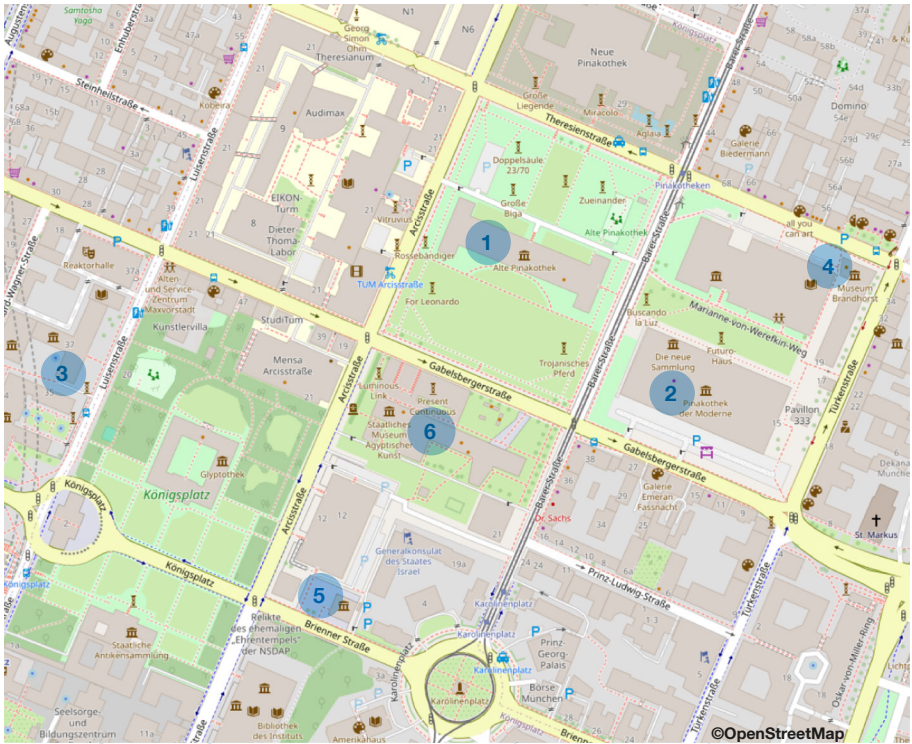
RESTAURANTS / BARS / CAFÉS

- 1 **Ballabeni, Theresienstraße 46**
very tasty ice cream, extremely popular
- 2 **Brasserie Tresznejewski, Theresienstraße 72**
cosy place for breakfast, lunch, and dinner and the drinks in between
- 3 **Café Jasmin, Steinheilstraße 20**
cosy coffee shop with excellent cake
- 4 **Café Münchner Freiheit, Barer Straße 27, in Alte Pinakothek**
can also be accessed without visiting the museum, delicious cakes and ice cream
- 5 **DOA Kitchen, Augustenstraße 74**
snack bar with kebabs and salads, incl. vegetarian dishes
- 6 **Ella, Luisenstraße 33** smart restaurant and café next to Propyläen on Königsplatz and the museum Lenbachhaus
- 7 **Il Mulino, Görresstraße 1** worth the little walk,
Italian with an inexpensive lunch menu, very nice outdoor seating
- 8 **Ionion, Augustenstraße 90**
Greek restaurant/snack bar, large portions of gyros
- 9 **Kartoffelkönig, Theresienstraße 122** vegetarian/vegan snack bar, Turkish food,
signature dish: kumpir, i.e. baked potato with toppings
- 10 **King Masala, Augustenstraße 52**
reasonably priced Indian lunch menu
- 11 **Löwenbräukeller, Stiglmaierplatz, Nymphenburger Str. 2**
a little walk, Bavarian beer and food, hosts up to 2,300 people
- 12 **Peet and the Flat White, Augustenstraße 52**
best coffee in Munich
- 13 **San Lucas Kaffeewirtschaft, Augustenstraße 113**
closes at 17.00, best coffee in Munich, offers Pastel de Nata
- 14 **Shiva, Augustenstraße 96**
reasonably priced Indian lunch menu
- 15 **Soy Vegan, Theresienstraße 93**
worth the little walk, excellent vegan Vietnamese cuisine
- 16 **Steinheil 16, Steinheilstraße 16**
very popular among hungry students, massive Schnitzel
- 17 **Twenty Pho, Augustenstraße 83**
Vietnamese cuisine, also many other dishes apart from pho
- 18 **Wirtshaus Maxvorstadt, Augustenstraße 53**
from 17.00, traditional Bavarian food

KUNSTAREAL

Kunstareal is the name given to the collection of outstanding museums in the Maxvorstadt district. The following museums are within walking distance of the conference venue and worth a visit:

- 1 Alte Pinakothek**
Houses European masterpieces from the 14th to 18th centuries, including works by Albrecht Dürer and Peter Paul Rubens.
- 2 Pinakothek der Moderne**
Dedicated to modern and contemporary art, architecture, and design, with works by Max Beckmann, Pablo Picasso, and others.
- 3 Lenbachhaus**
Featuring the Blue Rider group, including artists such as Wassily Kandinsky and Franz Marc.
- 4 Museum Brandhorst**
Specializes in contemporary art, with notable works by Andy Warhol, Cy Twombly, and other influential artists of the 20th and 21st centuries.
- 5 Glyptothek**
Focuses on Greek and Roman sculpture.
- 6 State Museum of Egyptian Art**
Extensive collection of ancient Egyptian artifacts and artworks.



Scan here & explore the Kunstareal on Google Maps

LITTLE PHRASEBOOK MÜNCHNERISCH

Munich has its own variant of the Bavarian dialect. Here is a little help.

gfreid mi - I am pleased

schee - nice, beautiful

fesch - good looking

gaudi - fun

schau ma moi - we will see

I mog di - I like you

schleich de - go away

Spezl - friend

Bazi - sly ear

hock di her da - join us

Pfiaddi - goodbye

Servus - hello + goodbye

Griaß God - Greeting, hello

Hosnbisla - softy

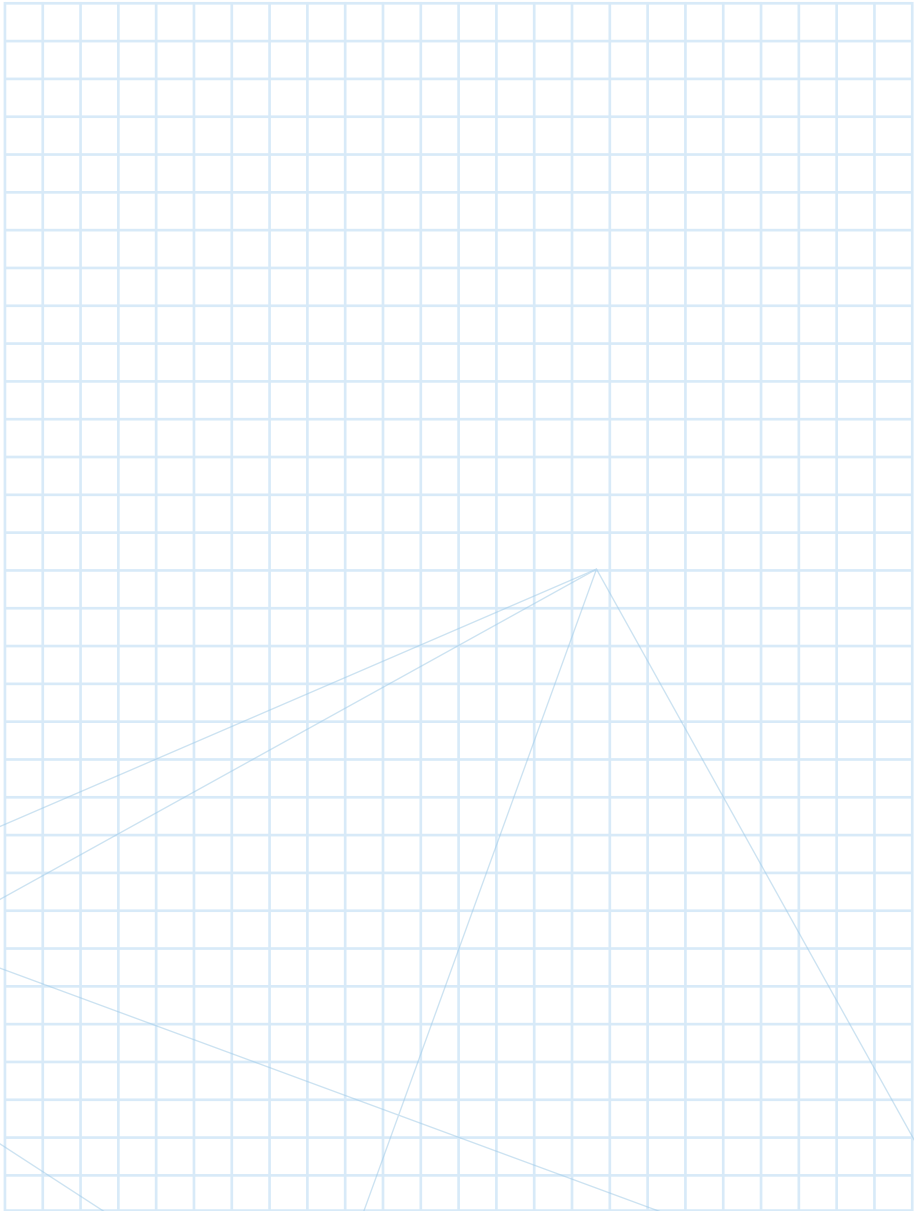
Wuisla - whiner

Schmarrn - nonsense

grantln - grumble

ratschn - gossip

NOTES



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TUM Campus map created by students
of the Cartography Master programme,
1st semester "Mapping Project".

Impressum**V.i.S.d.P.**

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c/o Prof. Dr. Rainer Kolisch
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OR 2024
MUNICH

CONTACT

Event location:

Downtown campus
Technical University of Munich,
Arcisstr. 21, 80333 Munich, Germany

or2024.de | or2024@tum.de | +49 89 289 15 261