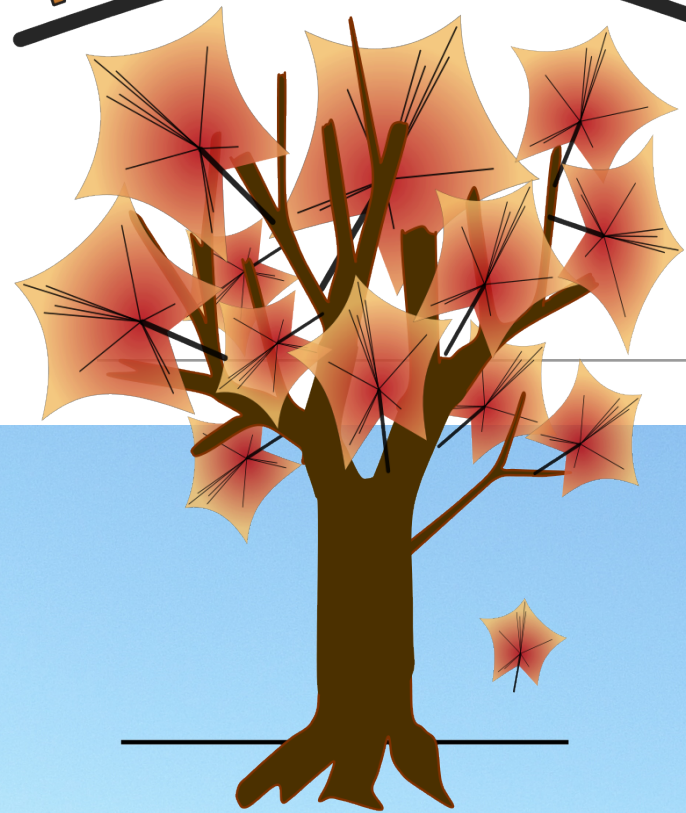


Herbstschule HEP



formerly Maria Laach

# Herbstschule 2026 Bad Honnef



## 57. Herbstschule of High-Energy Physics (formerly Herbstschule Maria Laach)

September 01 – 11, 2026

The school is primarily aimed at PhD students of theoretical and experimental high energy particle physics. The venue is the physics centre (Physikzentrum) in Bad Honnef. Participation is by invitation only. Students who are interested in attending may reach out to the expert closest to their geographical location, as listed here:

<https://herbstschule-hep.tp.nt.uni-siegen.de/institutes/>

### Main lectures:

Flavour Physics  
Physics beyond the Standard Model  
Experimental Physics at the LHC  
Machine Learning in HEP  
QCD and Jets at the LHC  
Standard Model Precision Physics  
Quantum Sensors

Marzia Bordone  
Ilaria Brivio  
Andreas Hoecker  
Jan Kiesel  
Rene Poncelet  
Stefan Weinzierl  
Steven Worm

U. Mainz  
U. Bologna  
CERN  
KIT  
U. Cracow  
U. Mainz  
DESY/HU Berlin

### Organisation:

Prof. Dr. S. Dittmaier  
Universität Freiburg

Prof. Dr. M. Klute  
Karlsruhe Inst. of Tech.

Prof. Dr. A. Lenz  
Universität Siegen

### Head organiser for 2026:

Prof. Dr. S. Dittmaier  
Universität Freiburg  
Hermann-Herder-Str. 3  
79104 Freiburg

Tel.: +49 761 203 - 5821 (Sekretariat)  
E-mail: [mlaach@physik.uni-siegen.de](mailto:mlaach@physik.uni-siegen.de)

More information available at  
<https://herbstschule-hep.tp.nt.uni-siegen.de/>





# Herbstschule 2026 in Bad Honnef: Time table

Timetable on INDICO Page: <https://indico.physik.uni-siegen.de/event/968/overview>

|             | Mon       | Tue     | Wed                  | Thu                  | Fri                  | Sat               | Sun  |
|-------------|-----------|---------|----------------------|----------------------|----------------------|-------------------|------|
|             |           | 1/9     | 2/9                  | 3/9                  | 4/9                  | 5/9               | 6/9  |
| 7h30        | Breakfast |         |                      |                      |                      |                   |      |
| 09h00-09h55 |           |         | SM - Weinzierl       | ML in HEP - Kieseler | Exp LHC - Hoecker    | SM - Weinzierl    |      |
| 10h10-11h05 |           |         | Exp LHC - Hoecker    | SM - Weinzierl       | ML in HEP - Kieseler | Exp LHC - Hoecker |      |
| 11h20-12h15 |           |         | ML in HEP - Kieseler | Exp LHC - Hoecker    | SM - Weinzierl       | Groups            |      |
| 12h30       | Lunch     |         |                      |                      |                      |                   |      |
| 14h30-16h00 |           | Arrival | Excerise             | Excerise             | Excerise             | Excursion ML      | Hike |
| 16h30-18h00 |           |         | Excerise             | Groups               | Groups               |                   |      |
| 18h30       | Dinner    |         |                      |                      |                      |                   |      |
| 20h00       |           | Welcome |                      | Hoecker              | Mannel               |                   |      |

Internet access was handed out at registration for your room

Sunday: 12:00 lunch

|             | Mon                           | Tue                           | Wed                     | Thu                     | Fri               |
|-------------|-------------------------------|-------------------------------|-------------------------|-------------------------|-------------------|
|             | 7/9                           | 8/9                           | 9/9                     | 10/9                    | 11/9              |
| 7h30        | Breakfast                     |                               |                         |                         |                   |
| 09h00-09h55 | Theo. Flavor<br>Phy - Bordone | Quantum Sens.<br>- Worm       | BSM - Brivio            | QCD -<br>Poncelet       | QCD -<br>Poncelet |
| 10h10-11h05 | QCD -<br>Poncelet             | QCD -<br>Poncelet             | Quantum Sens.<br>- Worm | BSM - Brivio            | BSM - Brivio      |
| 11h20-12h15 | Theo. Flavor<br>Phy - Bordone | Theo. Flavor<br>Phy - Bordone | BSM - Brivio            | Quantum Sens.<br>- Worm | Closeout          |
| 12h30       | Lunch                         |                               |                         |                         |                   |
| 14h30-16h00 | Exercises                     |                               | Exercises               | Exercises               | Departure         |
| 16h30-18h00 | Groups                        |                               | Groups                  | Groups                  |                   |
| 18h30       | Dinner                        |                               |                         |                         |                   |
| 20h00       | Krieg                         |                               |                         | Evening 5               |                   |



# Herbstschule 2026 in Bad Honnef: Organisers

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Markus Klute  
Experimental Particle  
Physics  
KIT Karlsruhe



Stefan Dittmaier  
Theoretical Particle Physics  
Albert-Ludwigs Universität  
Freiburg



Alexander Lenz  
Theoretical Particle Physics  
Universität Siegen



# Herbstschule 2026 in Bad Honnef: Lectures - large lecture hall

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## Main lectures

- Standard Model Precision Physics (4h)  
Stefan Weinzierl (Mainz)
- Experimental Physics at the LHC (4h)  
Andreas Hoecker (CERN)
- Machine Learning in HEP (3h)  
Jan Kieseler (KIT)
- Flavour Physics (3h)  
Marzia Bordone (Mainz)
- Physics beyond the Standard Model (4h)  
Ilaria Brivio (Bologna)
- QCD and Jets at the LHC (4h)  
Rene Poncelet (Cracow)
- Quantum Sensors (3h)  
Steven Worm (DESY/HU Berlin)



# Herbstschule 2026 in Bad Honnef: Exercises

large lecture hall- old lecture hall- seminar room

---

Feynman-Diagramme für Anfänger



Thorsten Ohl (U Würzburg)

Loop Diagrams



Stefan Kallweit (U Zurich)



# Herbstschule 2026 in Bad Honnef: Groups

large lecture hall- old lecture hall- seminar room

---

## Groups

|   |                                                                         |
|---|-------------------------------------------------------------------------|
| A | Joscha Ahäuser (KIT)<br>Federico Buccioni (CERN)                        |
| B | Ankita Mehta (Ghent)<br>Aleksei Rusov (TU Munich)                       |
| C | Artemis Sofia Giannakopoulou (Uni Freiburg)<br>Martin Lang (Uni Siegen) |

→ Consult the indico page to find your group!



# Herbstschule 2026 in Bad Honnef: Evening lectures - large lecture hall

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Thu, Sep 3, Andreas Hoecker

FCC-ee: CERN's Next Flagship Collider for the Precision Frontier

Fri, Sep 4, Thomas Mannel

Preparation for the visit to Maria Laach

Mon, Sep 7, Stefan Krieg

JUPITER - Exascale computing in Germany



# Herbstschule 2026 in Bad Honnef: Visit to monastery Maria Laach

---

## Why?

Nice historic location  
and former venue of the Herbstschule

## When?

Sat, Sep 5, 14:30 – 18:00

## How?

Transport by own bus (+ a few cars)  
from the Physikzentrum's parking lot

## What?

Guided tour through the monastery  
by „Gastpater“ Viktor





# Herbstschule 2026 in Bad Honnef: Hike

## When?

Sun, Sep 6, afternoon

## Options?

long version: start 13:00

short version: start 16:00

## Hiking routes?

Will be made available by Markus via komoot.

For dinner everybody will be hopefully back.





# Herbstschule 2026 in Bad Honnef: Social Media

←

Herbstschule HEP (fka Maria Laach)

67 posts



Maria Laach School 2023

...

✉

🔗

Following

Herbstschule HEP (fka Maria Laach)

@AthanasiusReal

Follows you

Man muß auch einmal auf ein Opfer verzichten können!

Translate bio

[herbstschule-hep.tp.nt.uni-siegen.de](https://herbstschule-hep.tp.nt.uni-siegen.de)

Joined September 2022

10 Following

48 Followers



Followed by Martin Bauer, Julia Harz, and 8 others you follow

Posts

Replies

Media

↻

Herbstschule HEP (fka Maria Laach) reposted



Alexander Lenz

@alexlenz42 · Jul 25

Still a few place available at the Herbstschule in Bad Honnef (formerly Maria Laach) - please contact us, if your are interested or if you know interested students!

55. Herbstschule of High-Energy Physics

(formerly Herbstschule Maria Laach)

September 03 – 13, 2024

The school is primarily aimed at PhD students of theoretical and experimental high energy particle physics. The venue is the physics centre (Physikzentrum) in Bad Honnef. Participation in the event is by invitation only. Students who are interested in attending may reach out to the expert closest to their geographical location, as listed here: <https://herbstschule-hep.tp.nt.uni-siegen.de/institute/>.

Main lectures:

Standard Model precision physics

Higgs and electroweak physics at the LHC

Kirill Melnikov

Marumi Kado

KIT

MPI



Instagram

#herbstschule2026





Willkommen im Physikzentrum !



# Short History of the House

- 1906 home for young ladies of higher descent as teachers of a household school for girls of lower descent

more information downstairs...



*Unterricht im Flecken.*



*Lehrküche I.*



*Strickunterricht.*



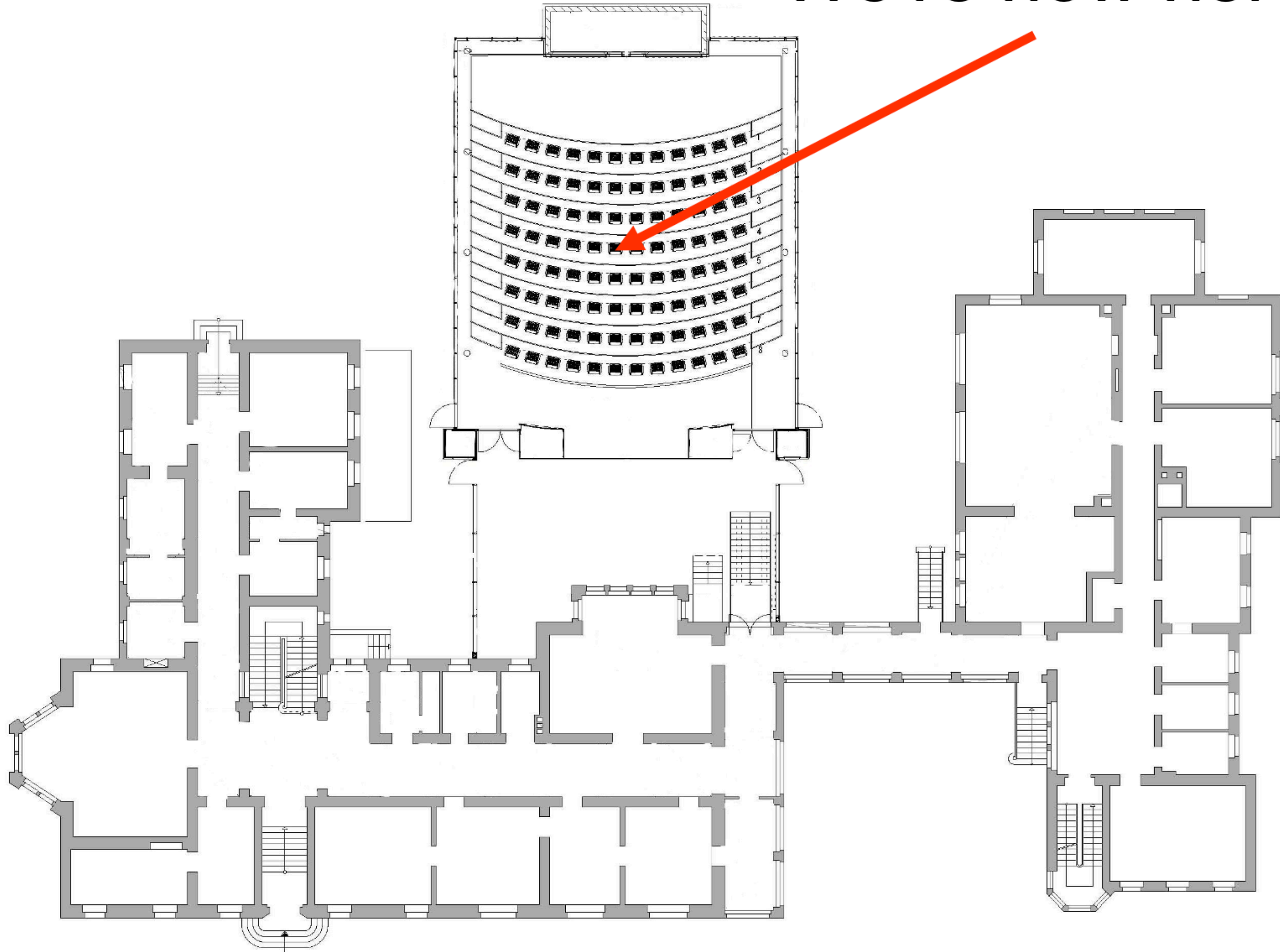
# Short History of the House

- 1906 home for young ladies of higher descent as teachers of a household school for girls of lower descent
- since 1976 house of the German Physical Society





We're now here

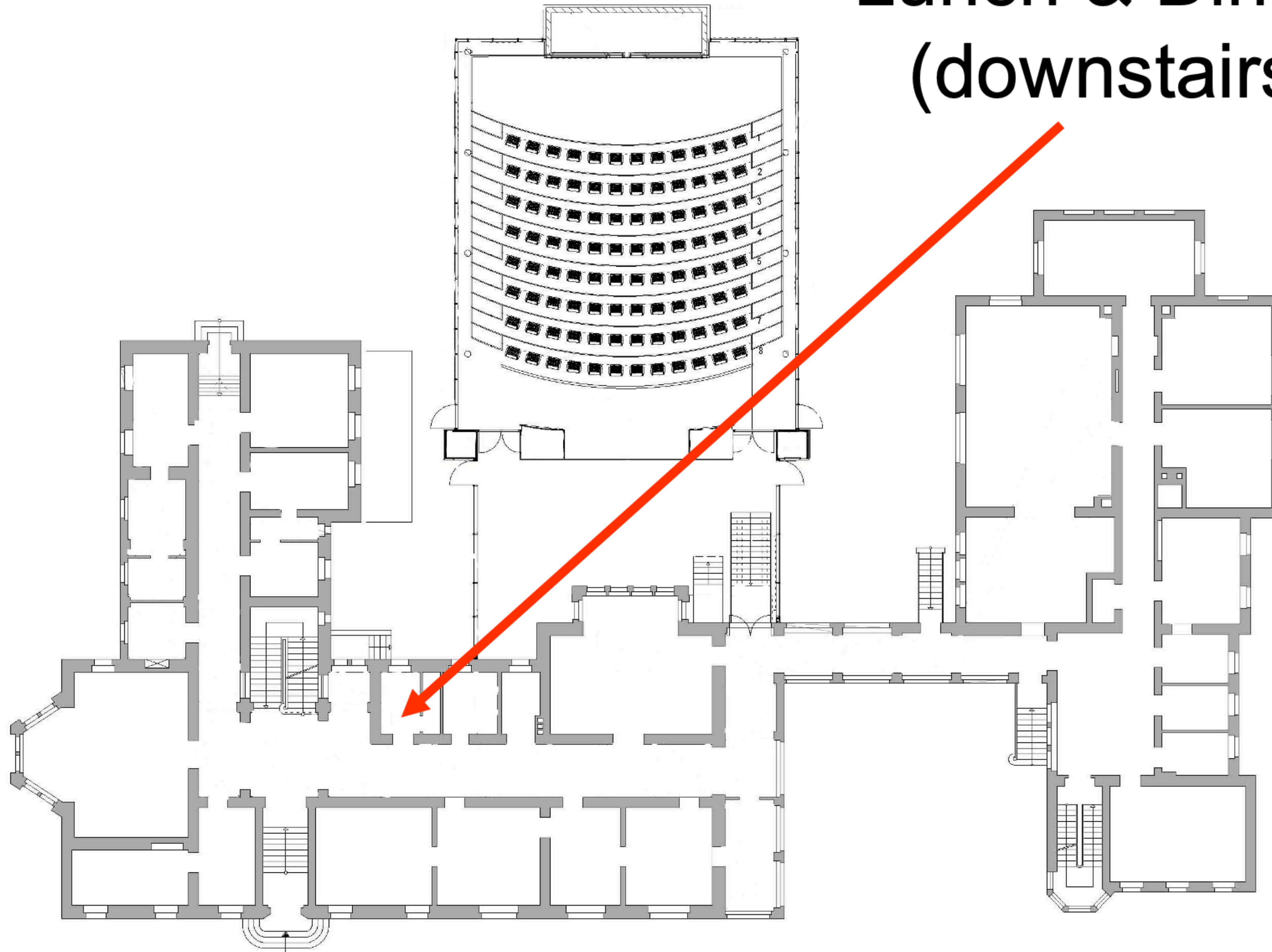




12:30

18:30

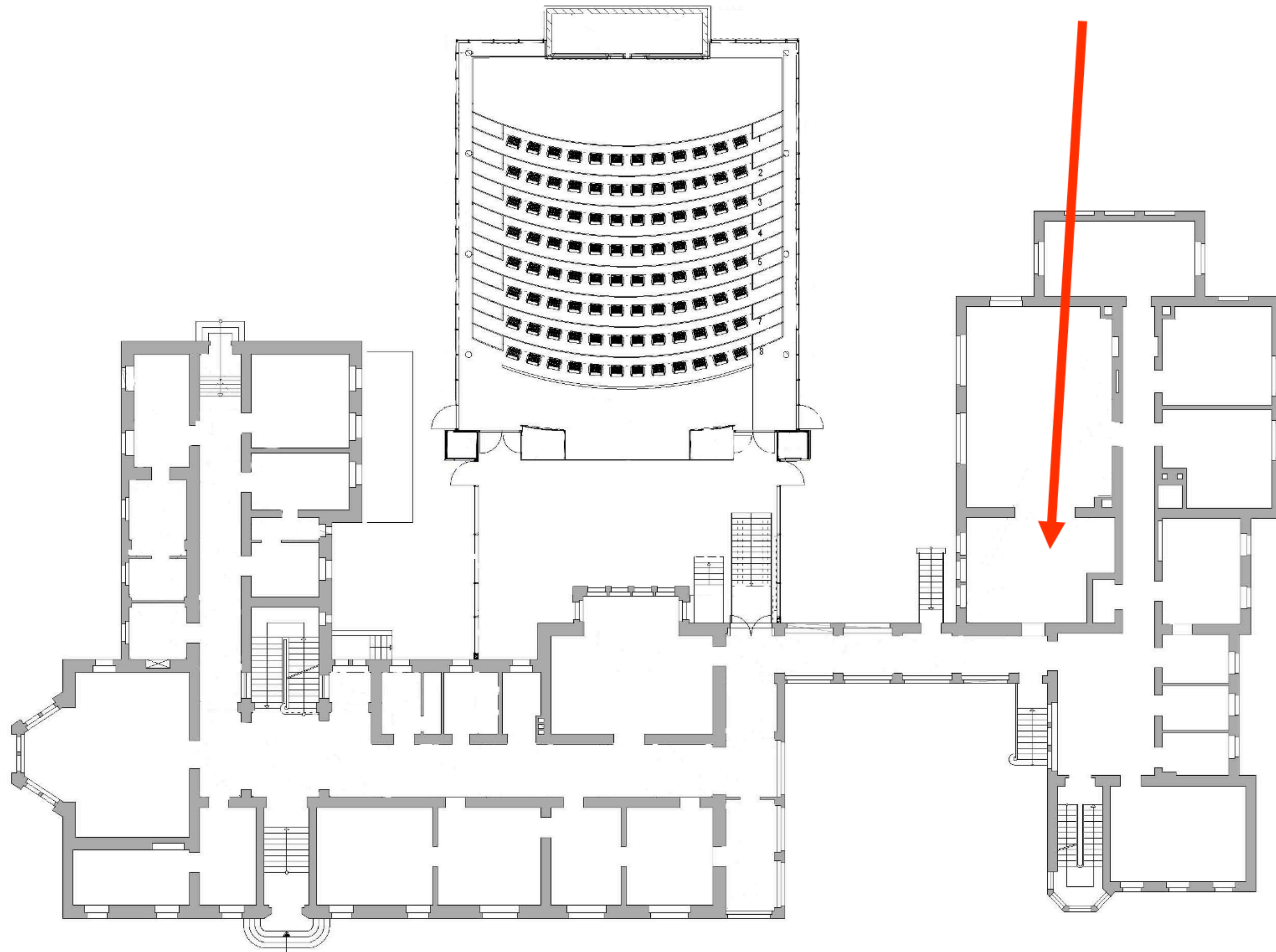
# Lunch & Dinner (downstairs)





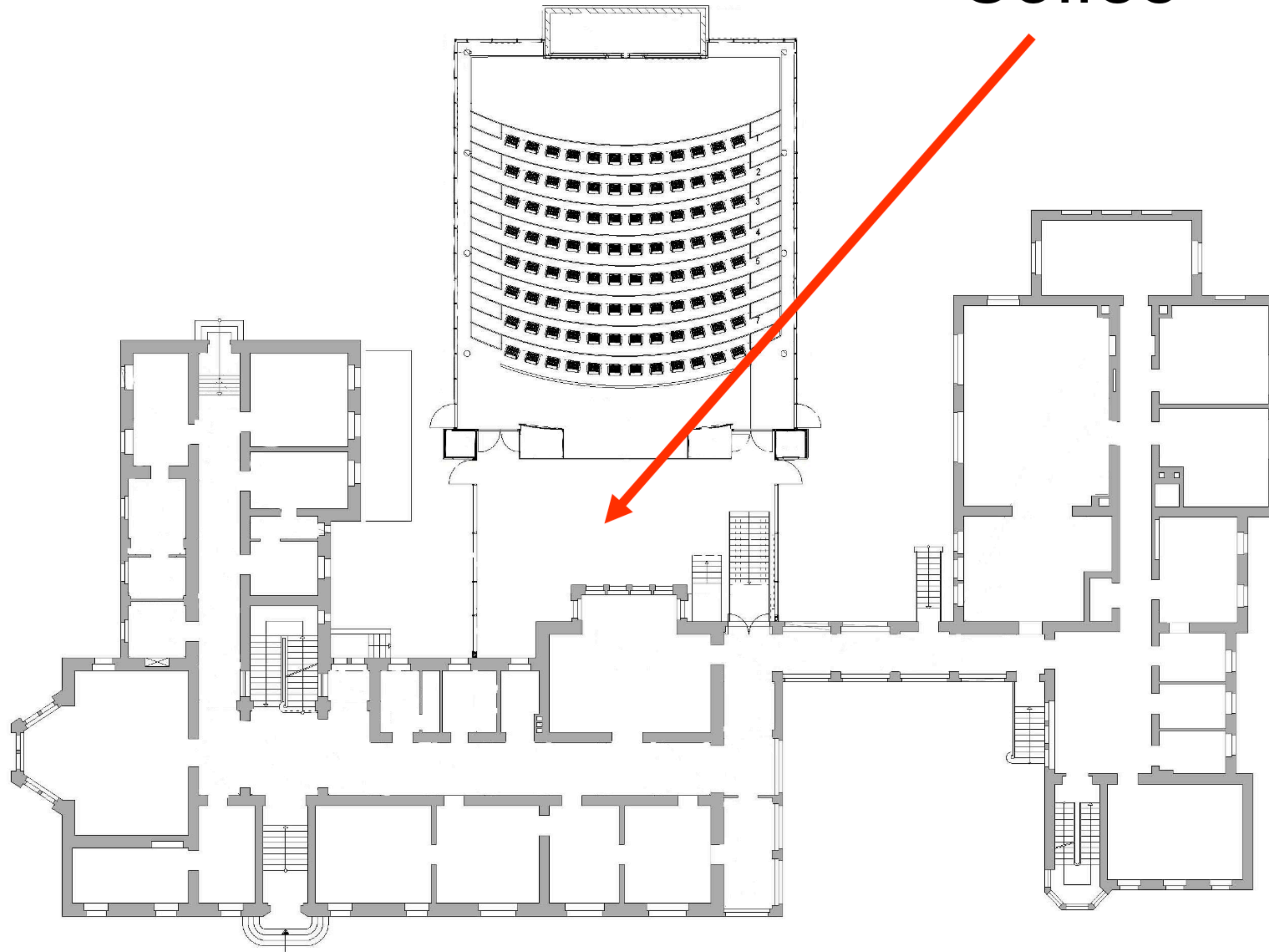
7:30 - 9:00

Breakfast





# Coffee

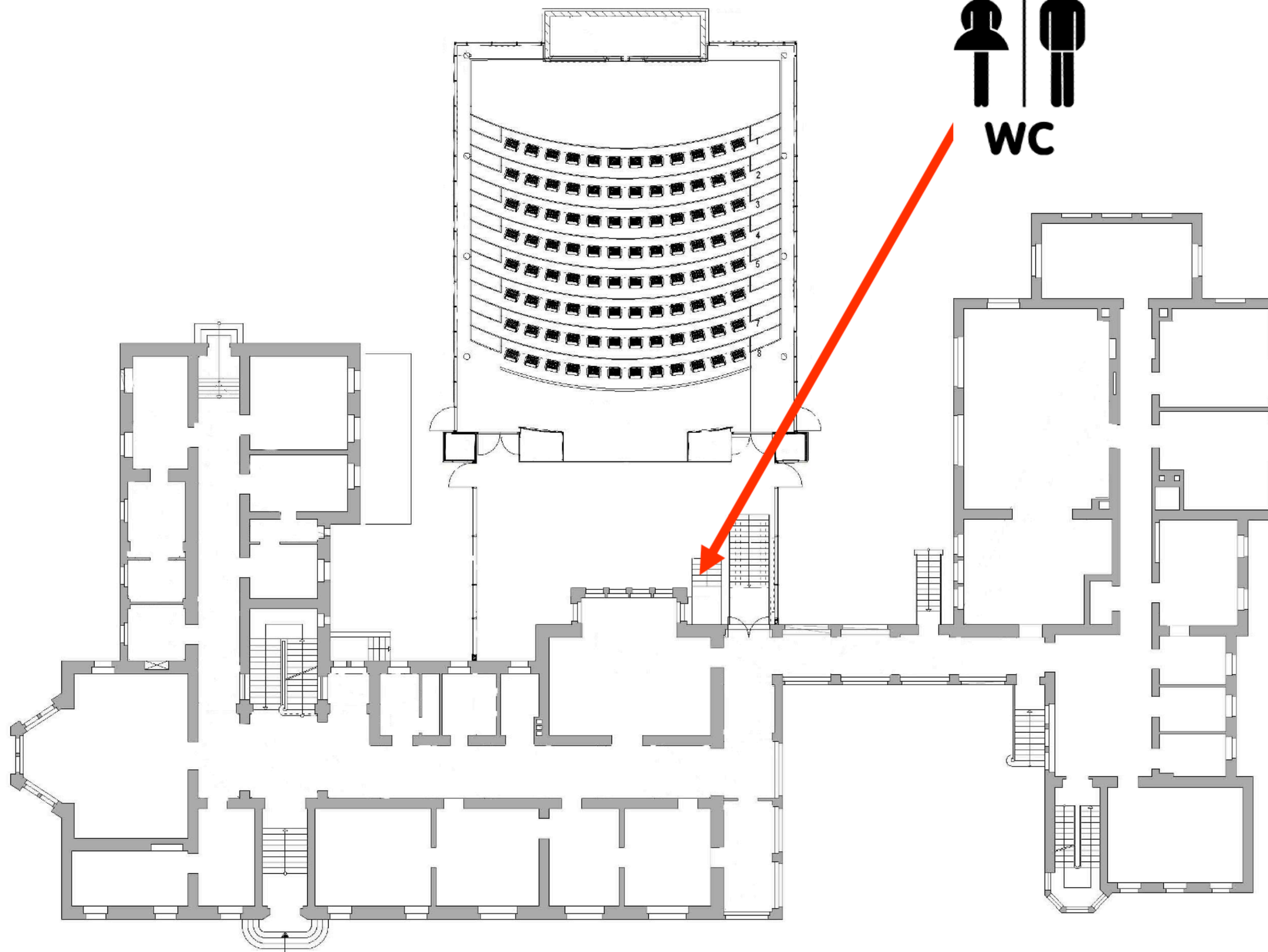




# Toilets



WC





Hard work/Fun

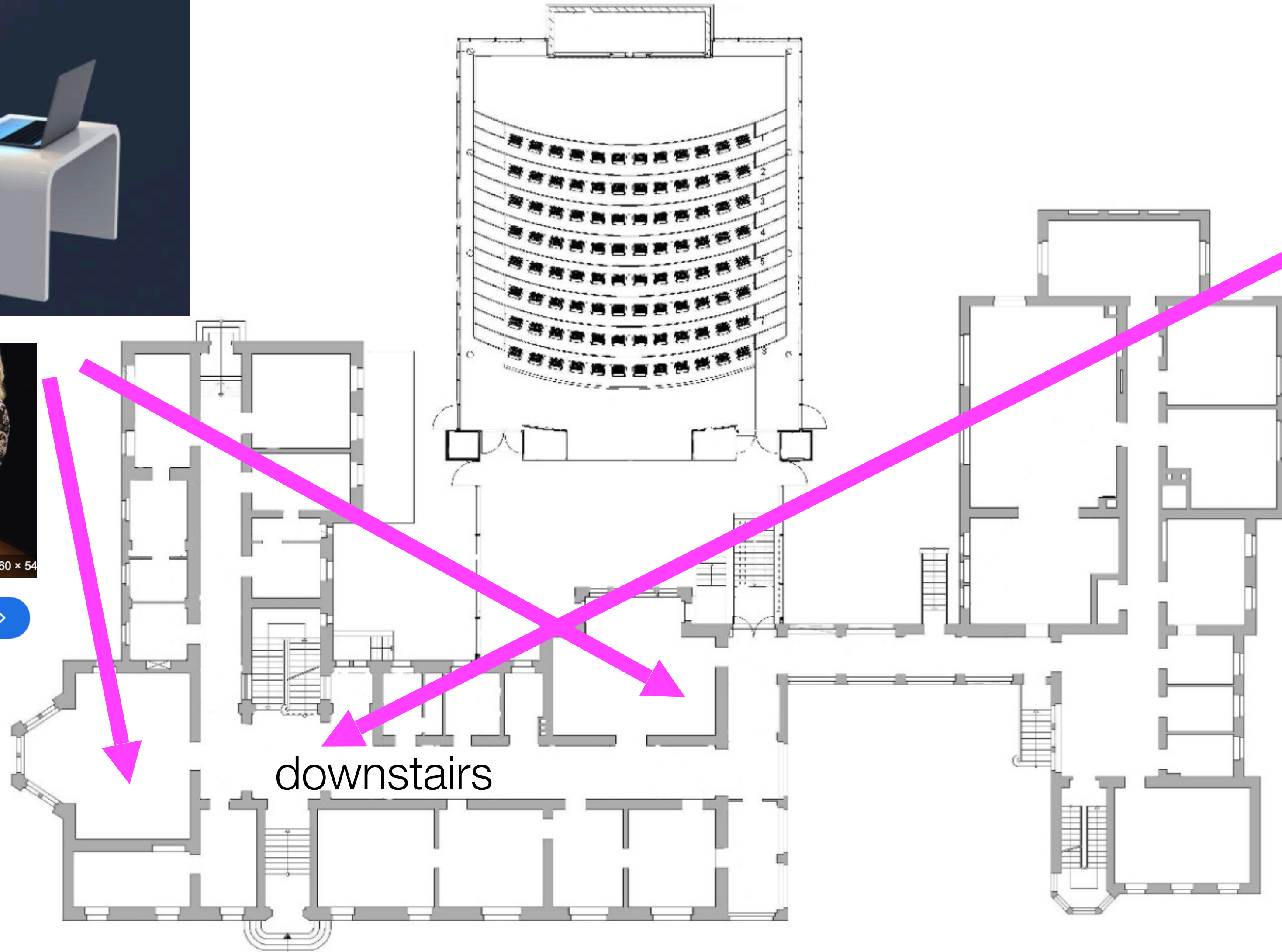


Fu



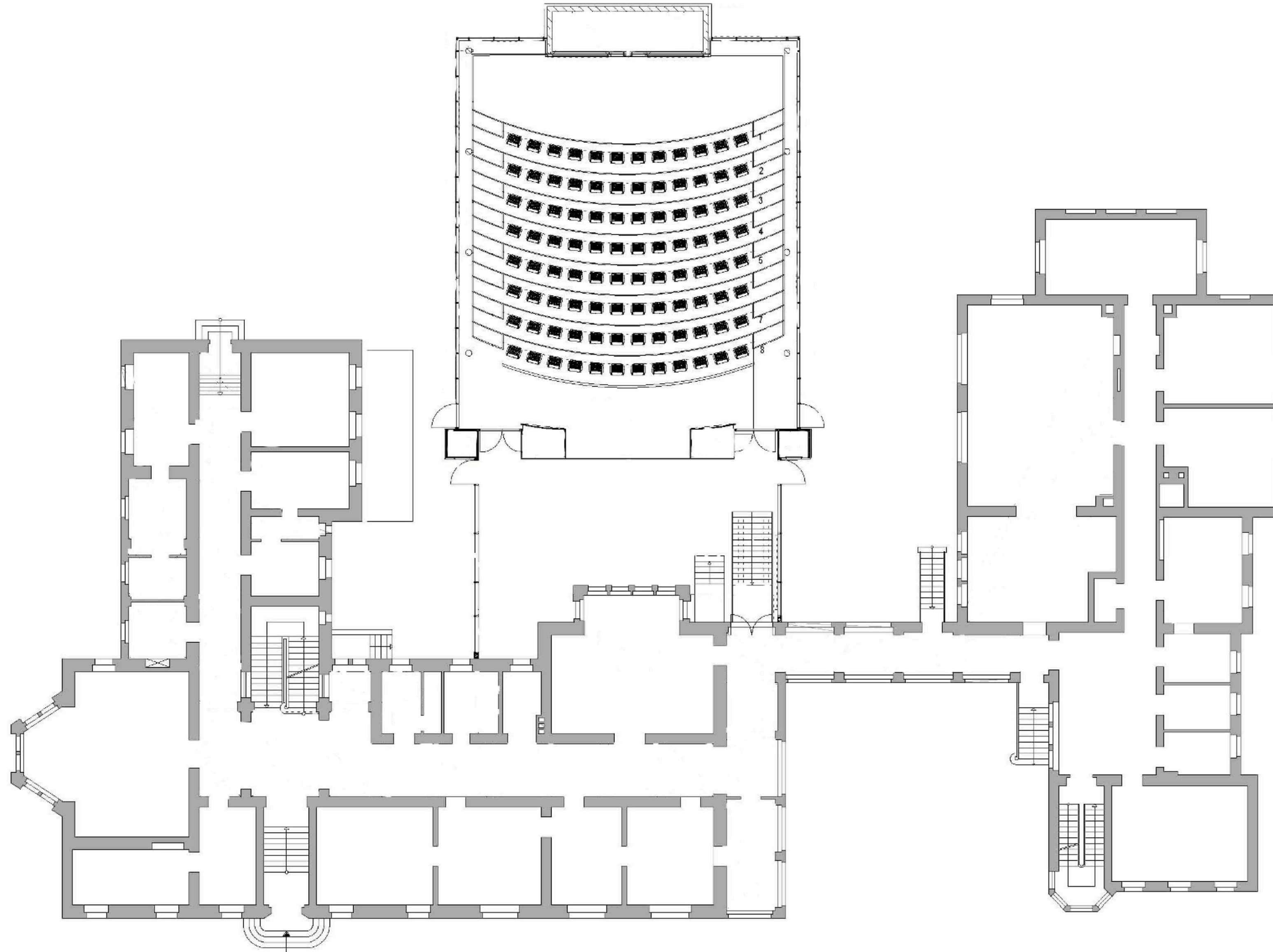
Was spricht noch für die Ehe? Der Philosophische Stammtisch

[Watch >](#)





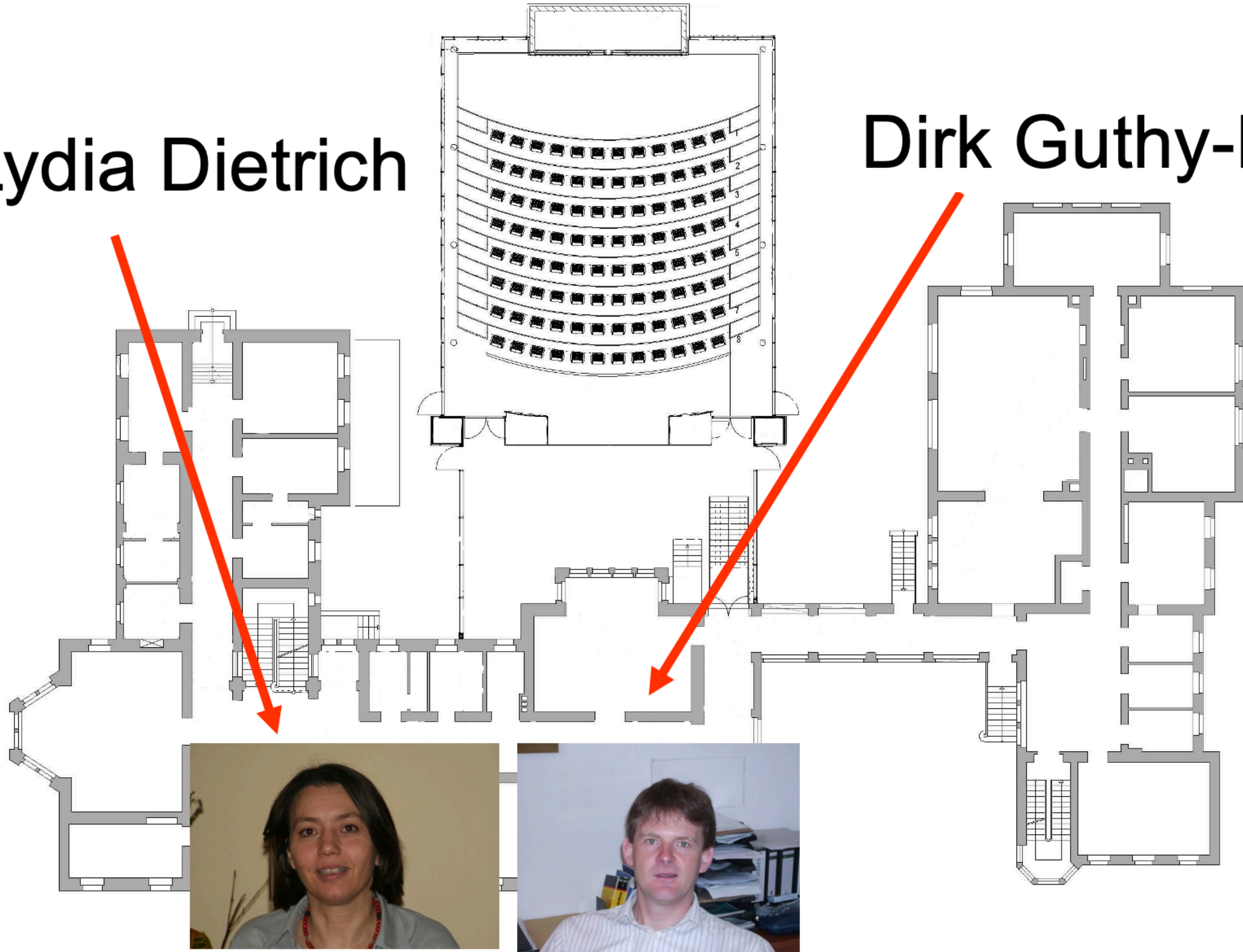
# Questions?





# Lydia Dietrich

# Dirk Guthy-Rahn





**IN CASE OF  
FIRE**



**EXIT BUILDING  
BEFORE TWEETING  
ABOUT IT**



# Prevent fire



Smoking and open fire in the building are strictly forbidden

There is a smoke detector in every guest room!





Fire brigade  
false-alarm-visit  
costs 1000 €





# In case of fire:

- Alert others (sleeping or having headsets)
- Help people with special needs
- Close windows and doors
- Leave the building:  
Do not use elevator, use the stairs



Gathering place in case of fire



In a safe location, call **112**  
to report the emergency



# House Rules

Breakfast: 7:30-9:00, Lunch: 12:30 Dinner: 18:30

Beverages (drinks ...)

-> mark at list

-> payment: on Friday until 13 a.m.

Big Water Bottles  
are for free



Door code: 4711 #  
or use your room transponder



# Freedom and safety



- To activate the lock press the transponder button
- If you don't lock your room door it will stay open!
- Keep your transponder during the whole meeting, don't put it to the key hanger!



# Freedom and safety

Your room transponder also opens all outer doors!



This is a transponder  
signal receiver

- To unlock the door  
just press  
the transponder button



Please be quiet outside after 10 p.m.





Have fun!

