

NA62 Kaon Physics Handbook

Welcome!

January 11th – 22nd, 2016

Mainz Institute for Theoretical Physics (MITP)



JOHANNES GUTENBERG
UNIVERSITÄT MAINZ





- Founded as **Roman military camp** around 12/13 AD, from former Celtic villages.
- Belonging for ~500 years to the Roman empire with the Rhine being a natural border to the Germanic regions.
- Nowadays almost every digging unearths Roman things.



Roman ship museum



Isis temple
(cellar of the Römerpassage)



- In 782: Mainz becomes **Archdiocese**.
- In the following the archbishop of Mainz became „archchancellor“ of the Holy Roman Empire and one of the seven prince-electors („Kurfürsten“) to elect the German emperor.
- During the 10th/11th century: construction of the **Mainz cathedral**.



Mainz cathedral („Dom“)



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- Around 1450: **Johannes Gutenberg**, printing with movable types.

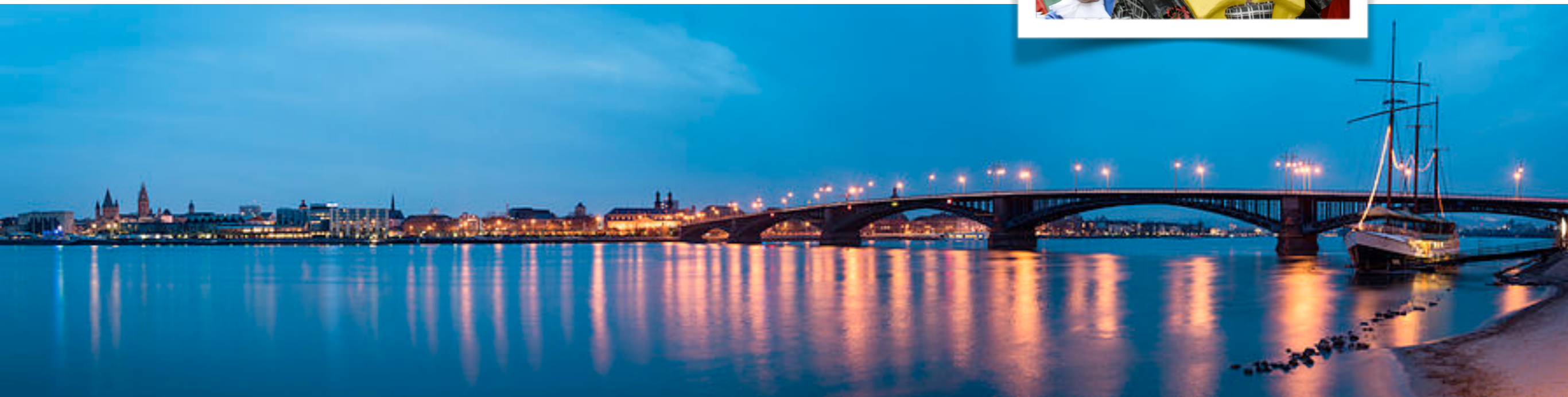


Johannes Gutenberg



Nowadays:

- About 150 000 inhabitants.
- Well-known for:
 - Carnival (second largest after Cologne).
 - Second German TV station (ZDF).
 - FSV Mainz 05 soccer team.



What to see in Mainz

- Mainzer Dom (Cathedral)



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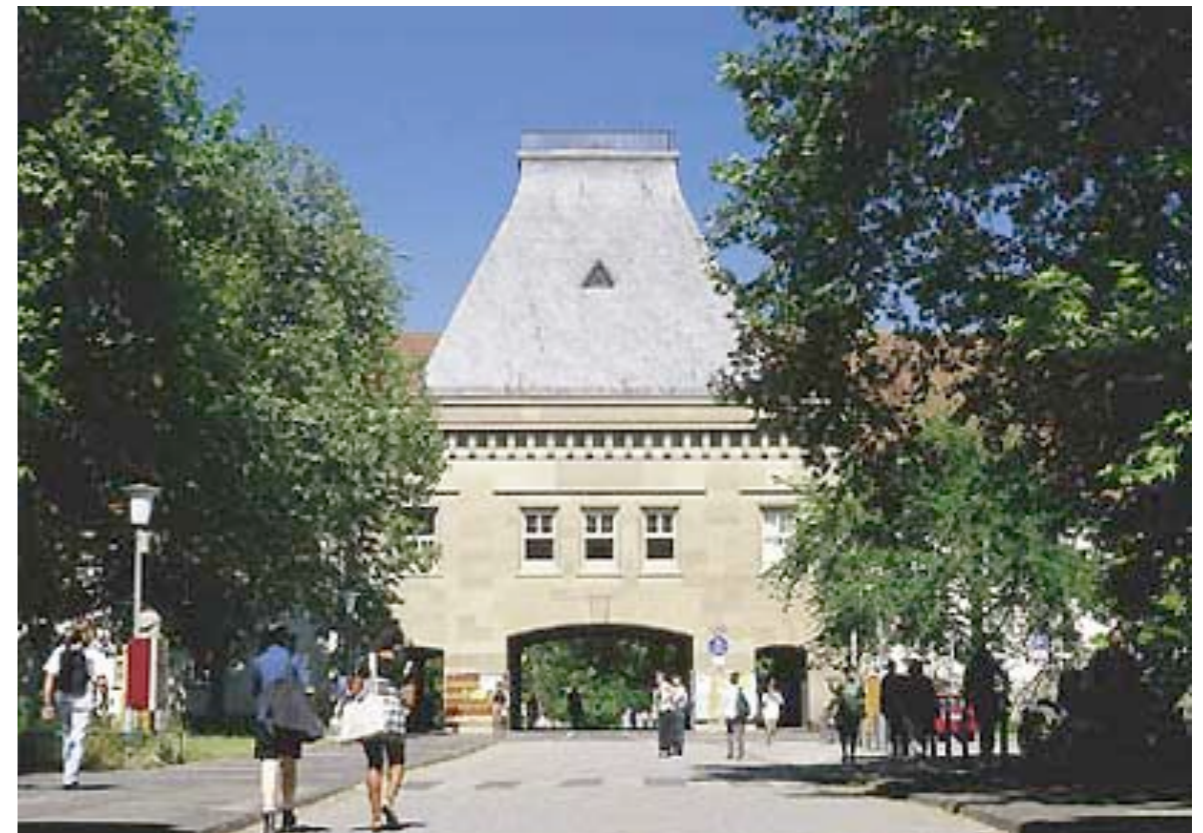
- Mainzer Dom (Cathedral)
- St. Stephan church (Chagall windows)
- Augustinerstraße and old town.
- Rhine



- Original university founded in 1477, but closed in the 18th century.
- Refunded after the war in 1946 as „Johannes Gutenberg-Universität“.
- Today: ~37 000 students, 10 departments including a hospital.



JOHANNES GUTENBERG
UNIVERSITÄT MAINZ



Department of Physics, Mathematics, and Computer Science with two institutes (Institute of Physics, Institute of Nuclear Physics).

- **Institute of Physics:**

- Quantum Physics
- Condensed Matter (Experiment & Theory)
- Theoretical Particle Physics
- Experimental Particle and Astroparticle Physics
(ATLAS, NA62, Calice, XENON, IceCube, Borexino, Juno,...)

- **Institute of Nuclear Physics:**

- Nuclear and Particle Physics, Theory & Experiment
(PANDA, BaBar, BESIII, Compass, ...)
- Mainz Microtron MAMI: electron accelerator up to 1.5 GeV

New developments:

- **Helmholtz Institute Mainz (HIM):**

- Cooperation between the GSI Darmstadt and the university for the construction and running of FAIR and PANDA.



- **PRISMA Cluster of Excellence:**

- One of two clusters in Germany for research of basic questions about the nature of the fundamental matter and their importance for the physics of the Universe.
- Funded by the German Research Foundation (DFG) and the State of Rhineland Palatinate.



Practical Info: The Essentials

- **Office Keys:**
 - Since door locks do not communicate with a central server, you need to activate your key each day at the little box just outside of MITP.
 - Key does not work with building doors (closed at the weekend). If you need access during the weekend, please tell us.
- **WiFi:**
 - eduroam
 - winulum or uni-mainz (with your guest account).
- **Coffee and snacks:**
 - Pretzels in the morning, cake in the afternoon.
 - Coffee, hot water and espresso all day at the MITP lounge.

Practical Info: The Essentials

- Lunch options

- **Mensa:**

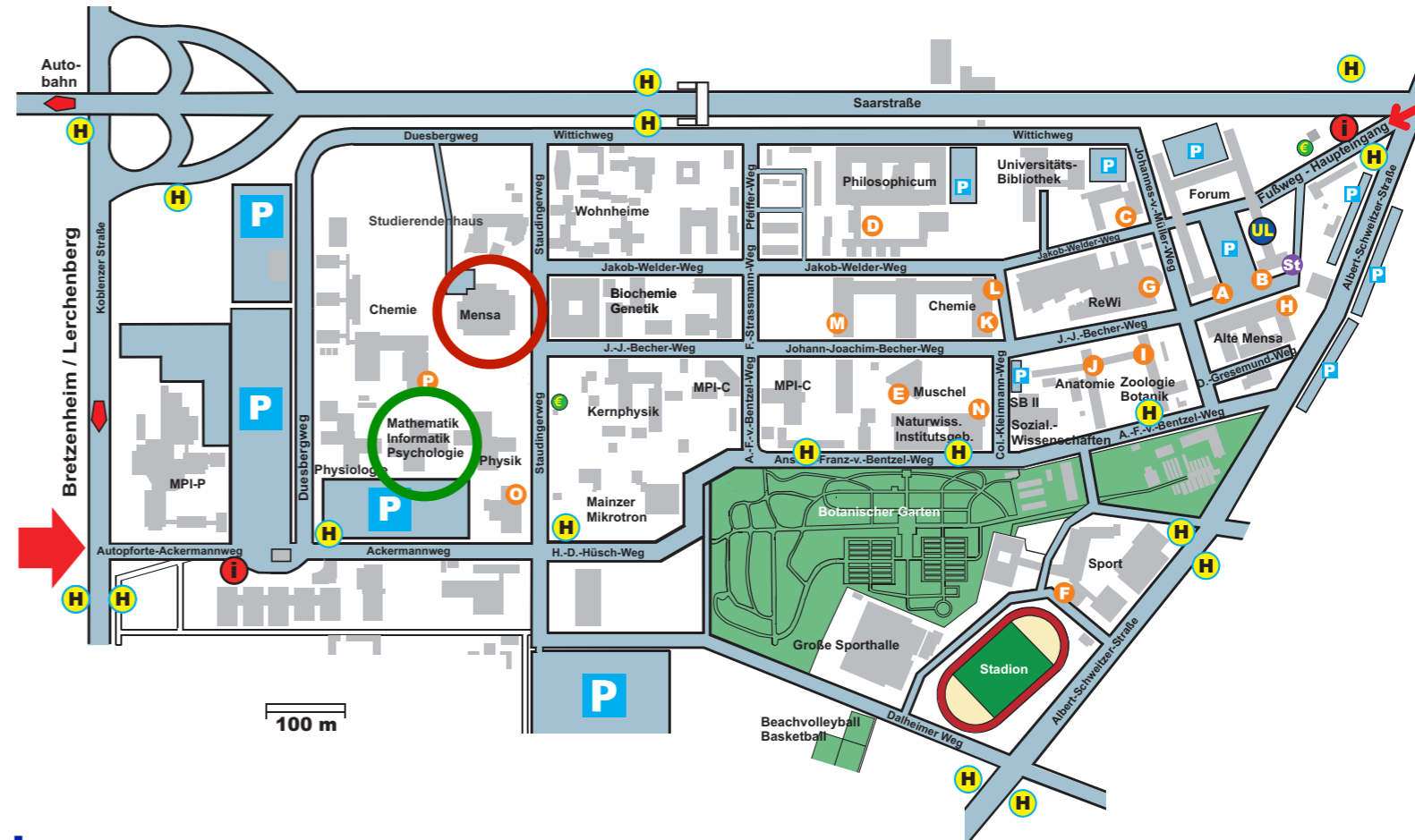
- next door to MITP,
requires cash card
(available at MITP and from
info point at the Mensa).

- **Cafeteria:**

- top floor of the Mensa
building. Less choices,
but accepts cash.

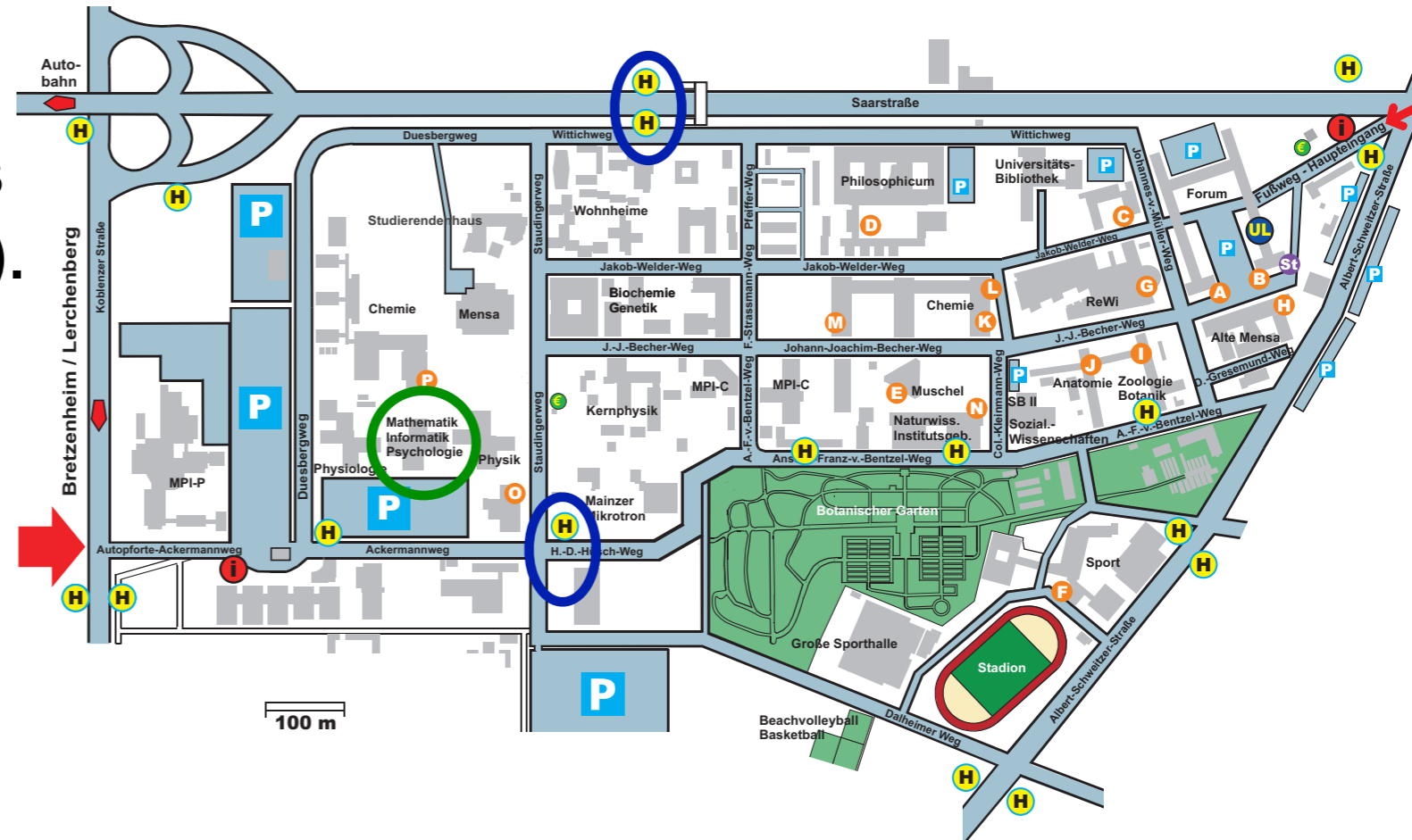
- **Fast Food / Restaurants:**

- “**Baron**” (Johann Joachim Becher-Weg 3, about 15 minutes walk)
 - “**Diwan**” (Mediterranean food, Döner, Johann Joachim Becher-Weg 25)
 - “**Dede’s Campus Döner**” (Staudingerweg 21)
 - “**Plaka**” (Greek restaurant outside campus, about 15 minutes walk)



Transportation:

- **Bus #69** (“Campuslinie”) goes through the campus (stop at “**Staudingerweg**”).
- Many local busses stop “**Friedrich-von-Pfeiffer-Weg**”
- **Tickets** available from automats or the driver.
Single ride € 2.75,
collection of 5 tickets € 11.- (“Sammelkarte”, only at automats)
day ticket for up to 5 people € 9.90.
- Use www.bahn.de for local, national, and international public transportation info and time tables.



Practical Info: Social Activities

Social activities, weekend plans, ...

- **Tomorrow (Tuesday):** joint dinner (place TBD)
- Possible **activities/excursions** at evenings or on the weekend:
 - Visit of the Gutenberg museum.
 - Visit of the Kupferberg sparkling vine cellars.
 - Excursion to the city of Oppenheim (visit of St. Catherine's church and cellar labyrinth).
 - Excursion to the city of Rudesheim (entry of the mid Rhine valley) and/or Kloster Eberbach.
- Further suggestions available from the MITP office and the local organizers.



- **Talks and Discussion Sessions**
 - At the MITP seminar room (where we are now).
 - Key available from the organizers.
- To help us receive continued funding for MITP, please remember to **acknowledge MITP** in any paper you have worked on while at MITP.

*Looking forward to a lively and fruitful workshop
and to the NA62 Kaon Physics Handbook!*