



Amplitudes, Motives and Beyond

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Scientific program at the
Mainz Institute for Theoretical Physics

May 26 - June 12, 2015

The Mainz Institute for Theoretical Physics started in 2013

Scientific programs 2015:

- Effective Theories and Dark Matter
- Amplitudes, Motives and Beyond
- Higher Orders and Jets for LHC
- Crossroads of Neutrino Physics
- Fundamental Parameters of the Standard Model from Lattice QCD
- Stringy Geometry

Topical workshops 2015:

- Challenges in Semileptonic B decays
- Higgs Pair Production at Colliders
- The Ultra-Light Frontier
- Quantum Vacuum and Gravitation

Practical issues: Location and rooms

- All guest offices are located in the middle building (Staudinger Weg 9), second floor, north wing.
- The seminar room is located on the same floor, west wing.
- The local mathematics group is located mainly in the fourth and fifth floor in the middle building.
- The local particle theory group is located mainly in the fourth and third floor of the physics building (Staudinger Weg 7) in the east wing.
- Officially, the balconies on the first and on the fifth floor can be used to get from one building to the other.

Practical issues: Food (Lunch)

- The default option: the mensa
 - for the lower floor a mensa card is needed,
 - on the upper floor (mensaria) one can pay cash.
- other options:
 - Baron (restaurant on campus, at the other end of the campus)
 - Plaka (greek restaurant in walking distance outside the campus)

“Zuerst müßt ihr uns was zu fressen geben, dann könnt ihr reden: damit fängt es an.”

(Must first makes sure that we have food to eat. Then you can resume your talking, that's where it begins.)

Bertolt Brecht

- If there is interest, we can book a table at a restaurant in town.

Amplitudes, Motives and Beyond

- Motivation: Interplay and similarities between
 - Scattering amplitudes (physics)
 - Motives (mathematics)
- Aim:
 - Bring together experts from high energy physics, mathematics and string theory.
 - Scientific program might ignite further progress and new results.

Scientific organisation

- There is ample time for discussions and work.
- Schedule:
 - 11h Morning talk: overview style, introducing a subject to all participants.
 - 16h Afternoon talk(s): informal style, can be on open problems or to trigger new collaborations.
- Talks scheduled as the program proceeds, timetable at

`https://indico.mitp.uni-mainz.de/conferenceDisplay.py?confId=26`
- If you are interested in giving a presentation, talk to one of the organisers.

Your participation and your contribution will make the scientific program a success!