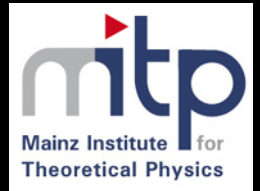
Coming soon:

The Amplitude Games
The Final

Mainz Institute for Theoretical Physics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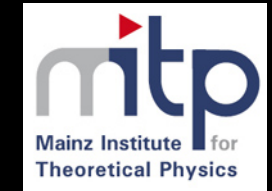
Theoretical Physics

In the year 2021 fifteen teams

In the year 2021 fifteen teams

participated in the first Amplitudes



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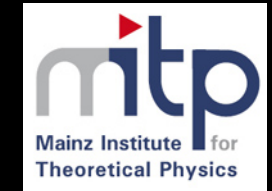

In the year 2021 fifteen teams
participated in the first Amplitudes Games.

They competed in the disciplines of

Mainz Institute for Theoretical Physics

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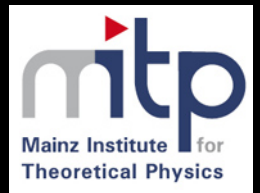

In the year 2021 fifteen teams
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Basics of Scattering Amplitudes

Mainz Institute for Theoretical Physics

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Jet physics

Mainz Institute for Theoretical Physics

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Basics of Scattering Amplitudes

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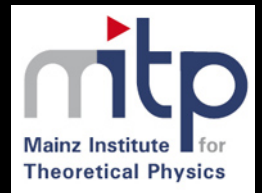
Effective Field Theories



In the year 2021 fifteen teams
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They competed in the disciplines of

Basics of Scattering Amplitudes

Jet physics

Effective Field Theories

Geometry of Amplitudes

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In the year 2021 fifteen teams *participated* in the first Amplitudes Games.

They competed in the disciplines of

Basics of Scattering Amplitudes

Jet physics

Effective Field Theories

Geometry of Amplitudes

Mathematical concepts

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In the year 2021 fifteen teams participated in the first Amplitudes Games.

They competed in the disciplines of

Basics of Scattering Amplitudes

Jet physics

Effective Field Theories

Geometry of Amplitudes

Mathematical concepts

Polylogs, elliptic polylogs etc.

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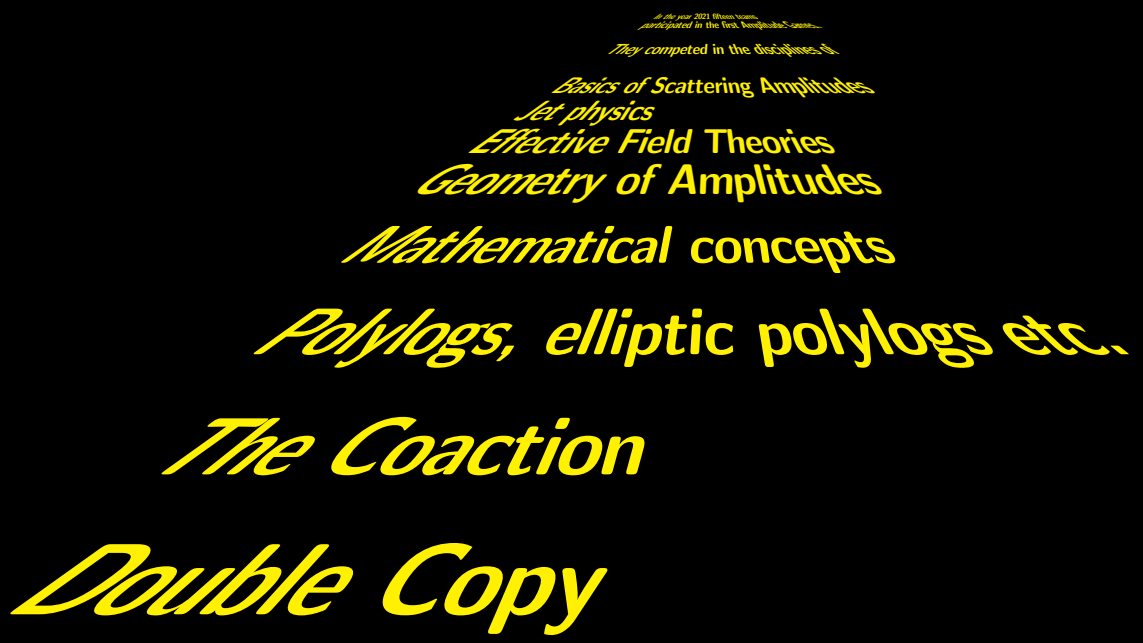
In the year 2021 fifteen teams
participated in the first Amplitudes Olympiad.
They competed in the disciplines of

Basics of Scattering Amplitudes
Jet physics
Effective Field Theories
Geometry of Amplitudes
Mathematical concepts
Polylogs, elliptic polylogs etc..

The Coaction



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participated in the first Amplitude

They competed in the disciplines of

Basics of Scattering Amplitudes

Jet physics

Effective Field Theories

Geometry of Amplitudes

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Polylogs, elliptic polylogs etc.

The Coaction

Double Copy

Bootstrap

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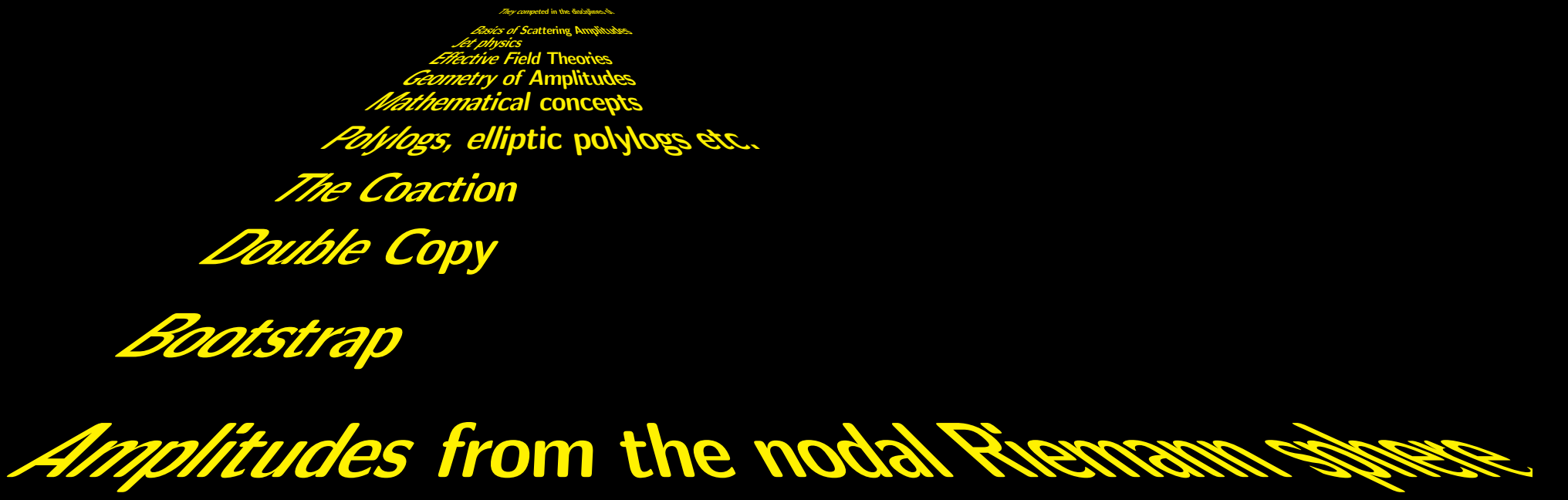

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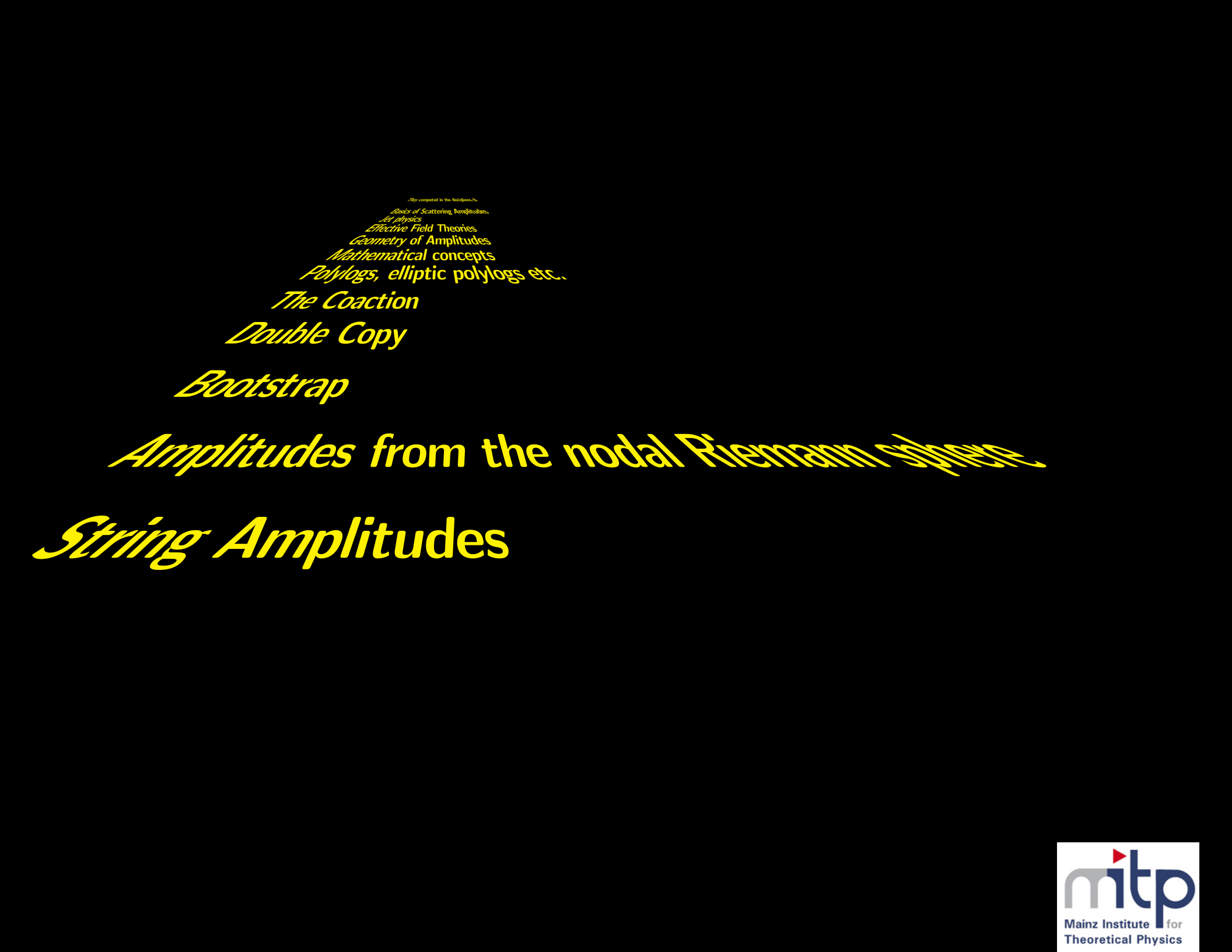

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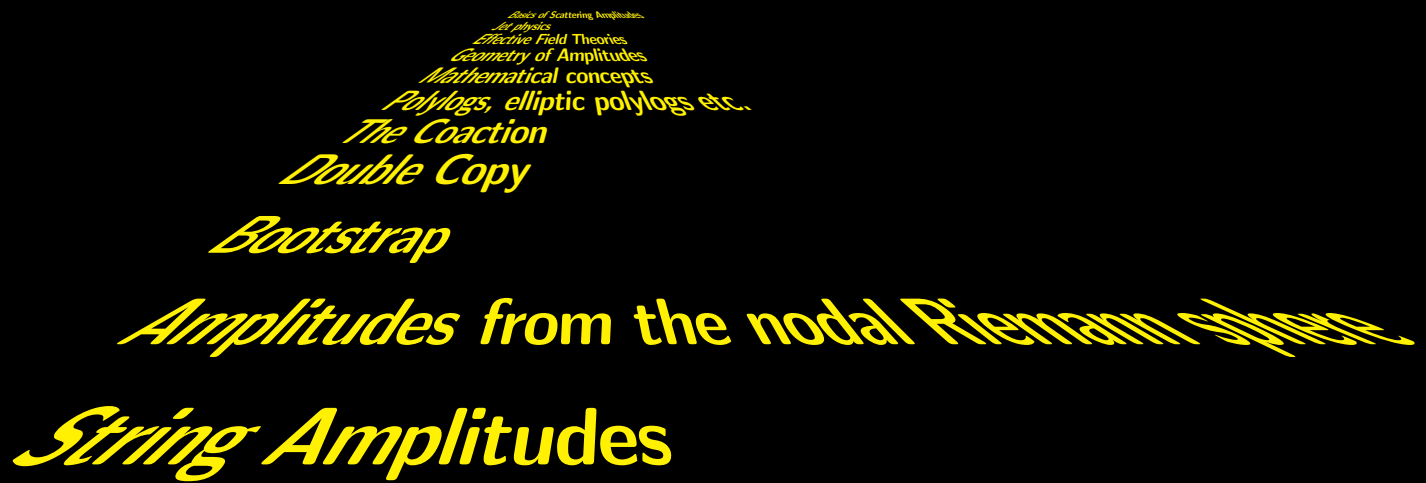

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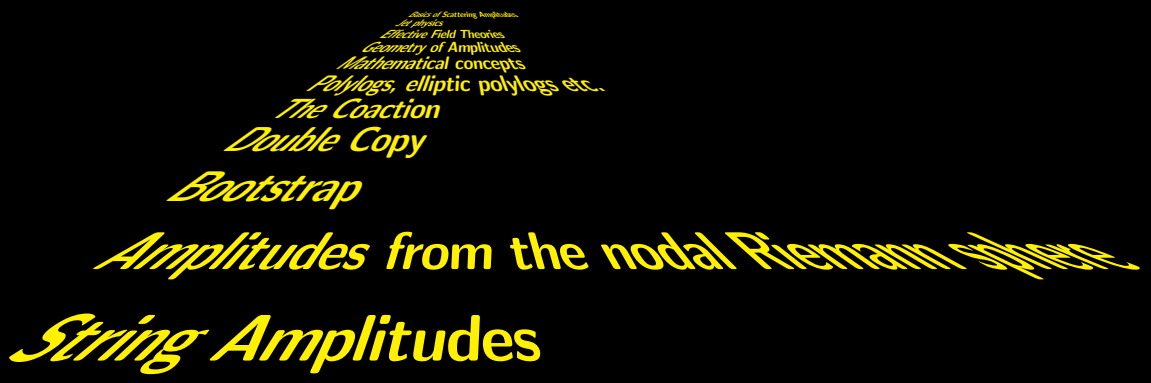

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The winning team will be announced

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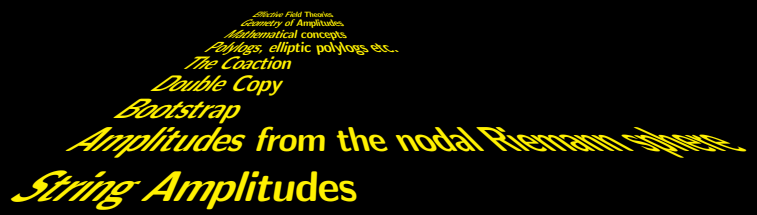
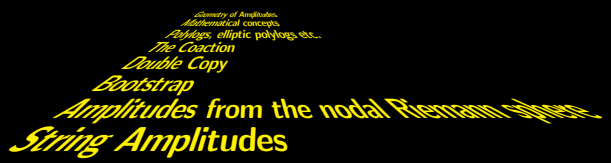


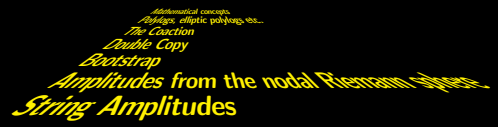
The winning team will be announced shortly.

Mainz Institute for Theoretical Physics



The winning team will be announced *shortly.*

Mainz Institute for Theoretical Physics



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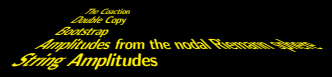

The winning team will be announced shortly.

Double Copy
Bootstrap
Amplitudes from the nodal Riemann sphere.
String Amplitudes

The winning team will be announced shortly.

Mainz Institute for Theoretical Physics

Bootstrap
Amplitudes from the nodal Riemann sphere.
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Mainz Institute for Theoretical Physics

The winning team will be announced shortly.

Bridge Amplitudes

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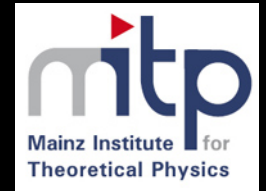

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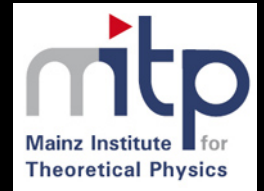

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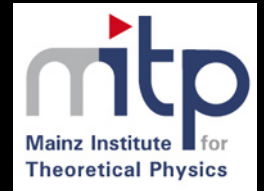

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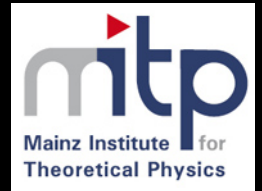

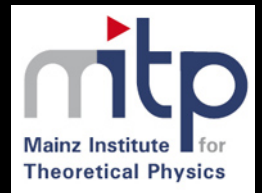
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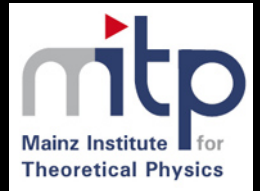
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The prize

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The frontrunners

After the second week (700 points out of 1100 points):

- Team 1 (650 points)
- Team 10 (603 points)
- Team 6 (600 points)
- Team 17 (566 points)
- Team 7 (554 points)

and the winner is ...

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Commercial break

- Scientific Programs (for a period of several weeks)

  MITP hosts several programs per year, each lasting for a period of up to four weeks. These programs are organized by a small team of scientists. Each will be attended by up to 25 scientists at any given time, who are expected to spend at least two weeks at MITP. Local housing expenses for accepted participants will be covered by MITP. The MITP guest relations team will arrange for housing according to the individual needs of participants.

- Topical Workshops (focused one-week workshops)

  MITP offers to the scientific community the opportunity to hold one-week workshops devoted to a specific topic at the forefront of current research with a maximum number of 30 participants. MITP provides sufficient funds for participants and organizers.

https://www.mitp.uni-mainz.de/

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and the winner is ...

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Team 1

- Andrés Aguilar
- Hao Chen
- Jorge Jaber-Urquiza
- Yuyu Mo
- Michael Saavedra

Congratulations!

Participation is everything!

Many thanks to

our lecturers:

- Henriette Elvang
- Alexander Huss
- Ira Rothstein
- Jacob Bourjaily
- Ruth Britto
- Claude Duhr
- Erik Panzer
- Donal O'Connell
- Lance Dixon
- Yvonne Geyer
- Oliver Schlotterer

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Many thanks to

the homework correction team:

- Alexander Aycock
- Ina Hönemann
- Farroukh Peykar Negar Khiabani
- René Pascal Klausen
- Philipp Kreer
- Sascha Kromin
- Hildegard Müller
- Robert Runkel
- Juan Pablo Vesga Simmons
- Johann Usovitsch

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Many thanks to

the MITP staff:

- Olga Zeeh-Sourli
- Silke Köster
- Kerstin Massmann
- Sibylle Wittek
- Felix Achtmann

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Final words

- We hope that you enjoyed the school, learned new things about physics and made contact to fellow Ph.D. students.

- We hope that the ideas and content of the lecturers find fertile ground and we look forward to see in the future publications from you!

The organisers
Christian Bogner, Camila S. Machado, Maximilian Stahlhofen, Zoltán Szőr and Stefan Weinzierl

Mainz Institute for Theoretical Physics