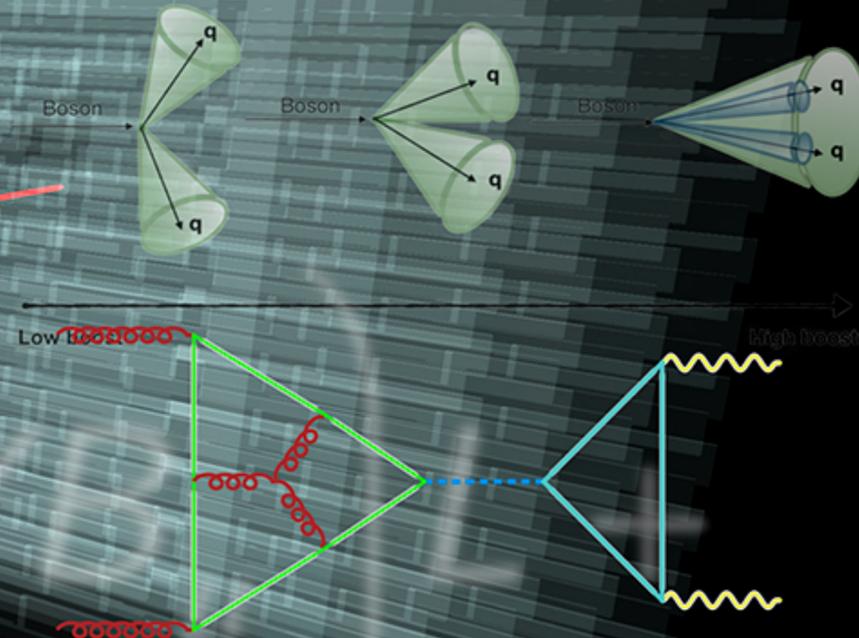


$$\mathcal{L}_{SM} = \frac{1}{2} \left(i\partial_\mu - \frac{1}{2} g\tau \cdot W_\mu - \frac{1}{2} g' Y B_\mu \right) \phi \Big|^2 - V(\phi) + g'' (\bar{q} \gamma^\mu T_a q)$$

CRC Annual Meeting 2024

Welcome



Welcome everybody!

Welcome in particular to the advisory board members Genevieve and Stefan!

Full advisory board: Genevieve Belanger, Sally Dawson, Stefan Dittmaier, Zoltan Ligeti

- About one third of the second funding period has already passed
- The purpose of this meeting is to
 - get updated about the science and related activities in the CRC
 - have a General Assembly, including elections
 - have a meeting of the PIs and the Young Scientists
 - discuss, socialise, ...

Activities

- Doctoral exchange program (*6 exchanges so far*)
- Outreach *see talk by Robert Harlander*
- Equal Opportunities
 - *GenderHEP Journal Club:*
 - *Tilman Plehn: summary of the KET document on Careers in particle physics in Germany*
 - *Emma Geoffrey: “How to be a kind and happy researcher”*
 - *Workshop by Emma Geoffrey and viewing of “Hidden Figures” at Young Scientists Meeting in Siegen*
 - *site-specific events*
- Events
 - Colloquia
 - *Gradient Flow - concepts and applications: Oliver Witzel, Robert Harlander*
 - *Axion-like particles: New physics below the GeV scale?: Felix Kahlhöfer*
 - *Searching for the Pulse of SUSY (Dark Matter): Sebastian Baum*
 - *Physicists in industry talk by Sophia Borowka “From theoretical particle physics to entrepreneurship”*
 - *Workshops e.g. Mathematical Structures in Feynman Integrals (Tobias Huber et al.)*

CRC Summer School 2024

September 30 - October 4, 2024 in Bingen am Rhein

<https://indico.scc.kit.edu/event/3982/>

Registration closes April 30, 2024

Lectures on

- Effective Field Theory, Higgs Phenomenology (Sally Dawson)
- Amplitudes (Lorenzo Tancredi)
- Resummation and Parton Showers (Silvia Ferrario Ravasio)
- Flavour Physics as a Window to New Physics (Zoltan Ligeti)
- Machine Learning (Claudius Krause)
- Quantum Computing (Michael Spannowsky)



Thanks

- Equal Opportunities Manager *Malgorzata Worek*
- Young Scientists Representatives
Nicoline Hemme, Eleftheria Malami, Magnus Schaaf
- Management board *Michael Krämer, Thomas Mannel, Kirill Melnikov, Tilman Plehn*
- Outreach Team *Robert Harlander, Marie Hein, Magnus Schaaf, Felix Kahlhöfer, Anton Osson, Alexander Lenz, Anastasia Boushmelev, Zachary Wüthrich, Tilman Plehn*
- Web-admin *Marco Bonetti*
- Computer admins *Sowmyia Balan, Lisa Biermann, Marco Bonetti, Manuel Egner, Marius Höfer, Vitaly Magerya, Jonas Matuszak*
- New CRC secretary *Tatjana Gordeeva*

Organisation at the meeting:

- Lunch will be served outside the lecture hall on both days
- The dinner tonight is in Badisch Brauhaus, Stephanienstr. 38, 20mins walk from here
- The hotel room will be paid directly by KIT if you booked with the keyword SFB_2024 or in the KIT Guest House

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Enjoy the Meeting!