

Strategy and Plans of the University

What is the role of particle physics?

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Vice President for Research (for another four days)

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- II. Structural plans for the short and mid-term future
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I. Overall Research Profile

Profile Areas

The University of Siegen focuses on the promotion and expansion of the already existing internationally visible profile areas and research foci in order to further sharpen the universities research profile. Those profile areas are characterized by long-time strengths in fundamental research. While already established through proven past merits at the University of Siegen, they are to be strengthened and expanded for future research. The profile areas of the University of Siegen represent thematically focused, partly interdisciplinary oriented research foci that address the major scientific and societal challenges.

Media & Culture

+

Education & Social Society

+

Sensorics & Visual Computing

+

Matter & Quantum Systems

+



Areas of Competence

The University of Siegen supports research activities that pick up on pioneering trends and take part in developing and shaping new research areas. On the one hand, these areas of competence are research-active areas that are either in the process of being established or redefined. These are being further expanded and supported by the university in order to lay the foundation for innovative research clusters and coordinated, large-scale research alliances. On the other hand, these areas also include research groups that conduct applied and practice-oriented research with a focus on transfer.

Smart Work & Smart Everyday

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Nanotechnology & New Materials

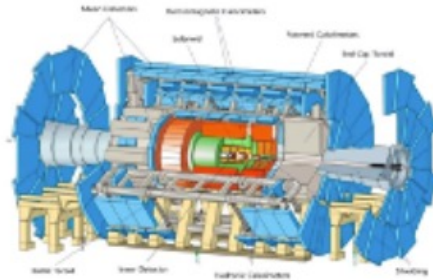
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Health Care & Gerontology

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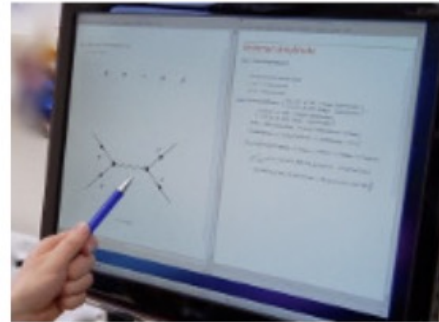
Matter and Quantum Systems:

Physics Department



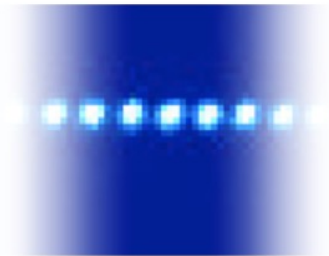
- » Prof. Dr. Markus Cristinziani
- » Prof. Dr. Ivor Fleck
- » Prof. Dr. Markus Risse

Experimentelle Teilchen- und
Astroteilchenphysik



- » Prof. Dr. Guido Bell
- » Prof. Dr. Thorsten Feldmann
- » Prof. Dr. Alexander Khodjamirian
- » Prof. Dr. Wolfgang Kilian
- » Prof. Dr. Alexander Lenz
- » Prof. Dr. Thomas Mannel

Theoretische Teilchenphysik



- » Prof. Dr. Christof Wunderlich

Experimentelle Quantenoptik



Theoretische Quantenoptik



- » Prof. Dr. Mario Agio

Nano-Optik

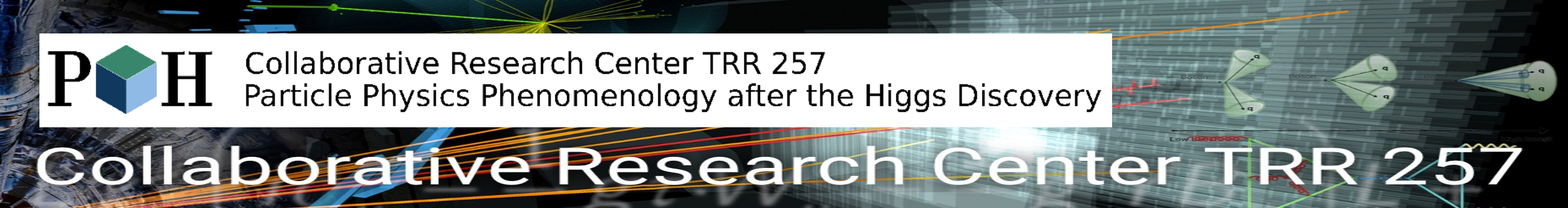
Particle Physics in Siegen: CPPS Center for Particle Physics Siegen



TP1 Theoretical Particle Physics
CPPS Center for Particle Physics Siegen



HEP Experimental High Energy Physics
CPPS Center for Particle Physics Siegen



P H Collaborative Research Center TRR 257
Particle Physics Phenomenology after the Higgs Discovery

Collaborative Research Center TRR 257



New Development: Excellence Strategy



Rheinische Friedrich-Wilhelms-Universität Bonn
Technische Universität Dortmund
Universität Siegen

Color meets Flavor – Suche nach neuen Phänomenen in der
starken und schwachen Wechselwirkung

Deadline for the full proposal is Aug. 22., 2024



Structural plans

Short and Mid-Term Future

The University is moving: New edificial infrastructures

Faculties 1, 2, and 3 have/will move downtown



Impressions ...



However: Faculty 4 will move /remain at the Haardter Berg



Eventually Physics will also move to the AR Campus!

I. Existing Buildings at AR

- AR M and K: The “white towers“: Remodelled to become office space
- AR UB: The current main library of USi

II. Buildings under Construction

- **INCYTE**: Interdisziplinäres Forschungszentrum für Nanoanalytik, Nanochemie und cyber-physische Sensortechnologien
- INCYTE is planned to be the main High-End Lab infrastructure of Faculty 4

III. Planed Buildings

Science Campus, but yet no clear idea

Hoelderlin and Paul Bonnarz Campus will be given up.



Assuming that the new University Management continues with this strategy, which implies

- That Science and Engineering remain in its main research profile, despite of small student numbers
- To re-consider the distribution of funds within the university
- That Matter and Quantum Systems has to remain successful

... then it is likely that CPPS will move sooner or (more probable later) to AR

This should be seen as a phantastic chance to get everyting new



**What can we do to enhance
particle physics?**

CPPS: Research and Teaching

- What can we do to enhance the Cooperation between the Pis?
- ... in particular between experiment and theory?
- Do we want/have a joint strategy concerning CPPS research?
- ... if yes, what is it, and how do we get to it?
- Is the balance of hardware vs. analysis vs. theory appropriate?
- To what extend should we focus our research?
- What can we do to get more Bac/Mas Students into particle physics?
- Can we improve our Focus Line “Particle Physics” of the Physics Master?
- What is the role of the “Non-Physics” curricula (Nano, Quantum, Med)?
- What are the offers to PhD students and PostDocs regarding qualification?



CPPS: Structural issues

- Do we consider the Lab-infrastructure sufficient, in particular in view of the Excellence-Cluster perspective
- Do we envisage a participation in INCYTE? If yes, at what time scale?
- ... If no, can the ENC infrastructure be made appropriate?

- Should we create a common fund for CPPS?
- ... if not from central funds, would we try to contribute for our own funds?
- From this: Would we create a fellowship program (Master/PhD level) to make CPPS more attractive?



**Thinks about all this,
use the retreat to discuss**

Thanks for listening!

