

DESY Virtual Theory Forum 2020 .

This meeting replaces the initially planned DESY Theory workshop entitled "Bright Ideas for a Dark Universe" which is postponed to 2021:

<https://th-workshop2021.desy.de/>

We really hope to see you all again in Hamburg next year.

Instead, this year: non-topical forum across all HEP-TH areas, to give opportunity to students and postdocs to present their work, in a all-plenary format, together with a few overview talks by more senior colleagues.

Heart-breaking talk selection as many excellent submitted abstracts could not be accommodated in the programme.

**A premiere in the long tradition of annual DESY Theory workshops:
This meeting will be hybrid. All sessions will happen at the same time remotely via Zoom and in the DESY Main Auditorium.**

Scientific Programme .

Tuesday 13:30-18:30: Cosmology & Astroparticles

Wednesday 13:30-18:30: Particle Phenomenology

Thursday 12:45-17:30: Strings & Mathematical Physics

Thursday 18:00: Public Hertz lecture

Friday 13:30-15:00: Cosmology & Astroparticles

Friday 15:15-16:45: Particle Phenomenology

Friday 17:00-18:20: Strings & Mathematical Physics

7 overview talks .

- Tuesday 13:45, **Recent ideas for dark matter direct detection, by Yonit Hochberg (Jerusalem)**
- Tuesday 16:15, New ideas from the neutrino sector, by Mariam Tortola (Valencia)*
- Wednesday 13:45, Standard Model, by Lorenzo Tancredi (Oxford)*
- Wednesday 16:15, High-intensity probes of dark sector particles by Stefania Gori (Santa Cruz)*
- Thursday 13:00, Geometries for scattering amplitudes, and beyond, by Livia Ferro (LMU)*
- Friday 13:30, Latest developments in gravitational waves from early universe cosmology, by Daniel Figueroa (Valencia)*
- Friday 15:15, Dark matter, by Stefan Vogl (Munich)*

For local participants .

Local participants should :

- wear a mask in the Auditorium and**
- sign up the attendance list at the beginning of each day.**

**Allowed seats are marked with adhesive tape.
There should be 2 free seats around you.**

There will be `real' coffee breaks for the locals.

For all .

Please remember to mute your microphone except when asking a question.

Communication via Mattermost Channel .

Link sent to all registered participants



Fady Bishara 3:54 PM

Welcome to the DESY Virtual Theory Forum 2020!



Julia Harz 8:20 PM

Please, do not forget to sign up for the dedicated session channels!

You can find them by clicking on "More..." in the Public Channels menu.

PUBLIC CHANNELS +

🌐 Cosmology & Astroparti...

🌐 Feedback

🌐 Off-Topic

🌐 Particle Phenomenology

🌐 Strings & Mathematical...

🌐 Town Square

Hertz public lecture by Helen Quinn.

HERTZ LECTURE.

DESY Lecture on Physics 2020

Mistakes on the way to a good idea:
Peccei-Quinn Symmetry. A tribute to
Roberto Peccei.

Prof. Dr. Helen Quinn
(SLAC National Accelerator Laboratory)

24 September 2020
18:00 h, talk will be live-streamed

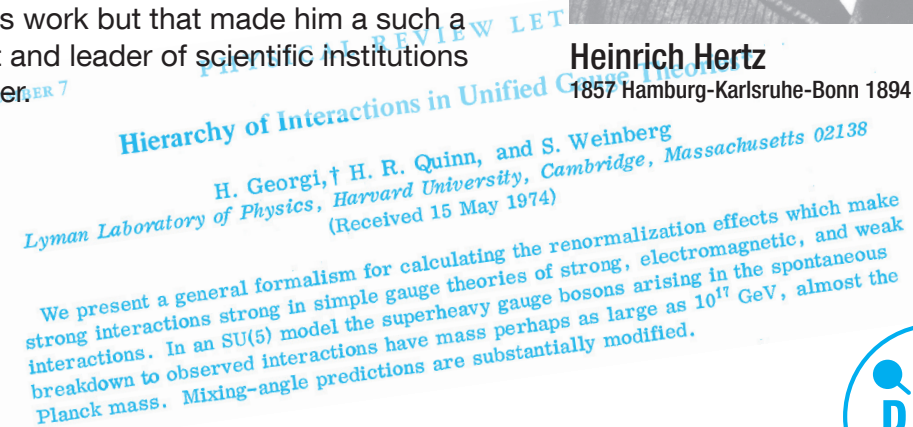
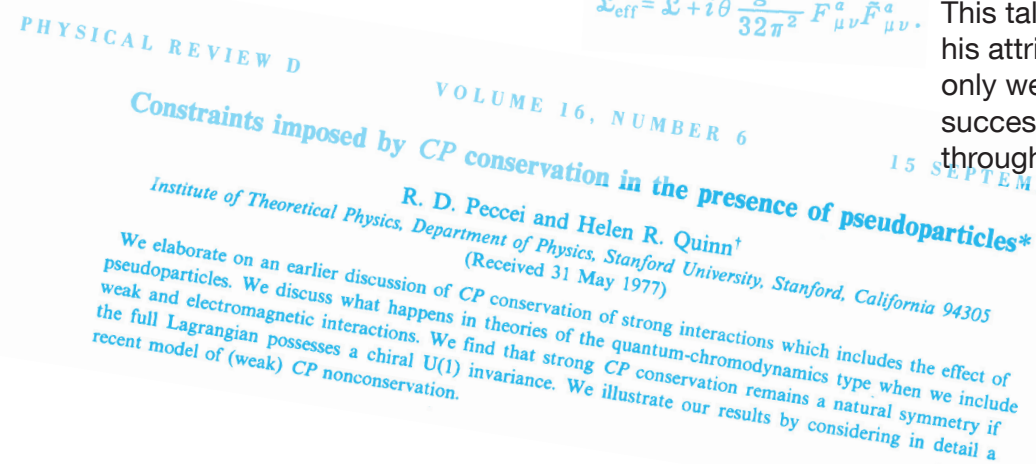
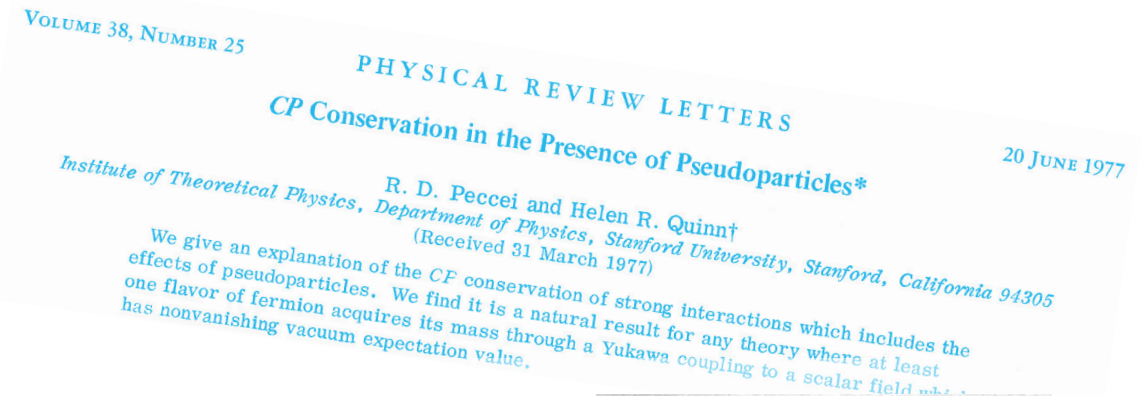
<https://webcast.desy.de>

I will talk about the development of the idea now known as Peccei-Quinn symmetry, and its consequences. I will use this work that I did together with Roberto Peccei to illustrate key features of how science progresses. While the problem we were addressing, and the answer we found for it are quite technical, this will not be a highly technical lecture. Rather it will be a story about our confusions and the circuitous path to their resolution. It is also an illustration of how the mathematical descriptions of physics, as Heinrich Hertz pointed out in reference to Maxwell's equations, not only provide solutions to the question or problem that led to their development, but can also suggest things that their developers did not even dream about.

This talk will also be a tribute to Roberto, emphasizing his attributes as a scientist, and as a person, that not only were key to this work but that made him a such a successful scientist and leader of scientific institutions throughout his career.



Heinrich Hertz
1857 Hamburg-Karlsruhe-Bonn 1894



Feedback welcome.

Feel free to contact members of the organising committee:

**F. Bishara (DESY),
C. Garcia Cely (DESY),
J. Harz (TU Munich),
O. Hohm (Humboldt U.),
H. Kim (Weizmann),
T. Konstandin (DESY),
P. Liendo (DESY),
G. Papathanasiou (DESY),
R. Porto (DESY),
F. Rühle (CERN),
B. Shakya (CERN),
G. Servant (DESY & UHH),
S. Westhoff (U. Heidelberg).**

or even better use our 'Feedback' channel on Mattermost:

