

KCETA event summer – Code des Universums

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DPG Frühjahrstagung 2023



KCETA



- KIT Center Elementary Particle and Astroparticle Physics
- One of nine KIT centers
 - cross-divisional research activities, representing the strategic research fields
- Experimental and theoretical research
- Research topics:
 - Cosmic rays, High-energy Neutrino Astronomy, Dark Matter, Quantum field theory, Experimental collider physics, Theoretical collider physics, Flavor physics, Neutrino physics, Computational physics, Detector Instrumentation and Data Acquisition, Technology Development, Accelerator Physics



KCETA event summer



- Travelling exhibition „Code of the Universe“ from CERN
- At Triangel Open Space
- Organised by KCETA together with
 - Triangel
 - City of Karlsruhe
 - CERN
- Porgramm
 - 4 weeks exhibition in summer 2022
 - Opening with vernissage
 - Afternoon science
 - Podium discussion
 - Public talks
 - Events for pupils



Location

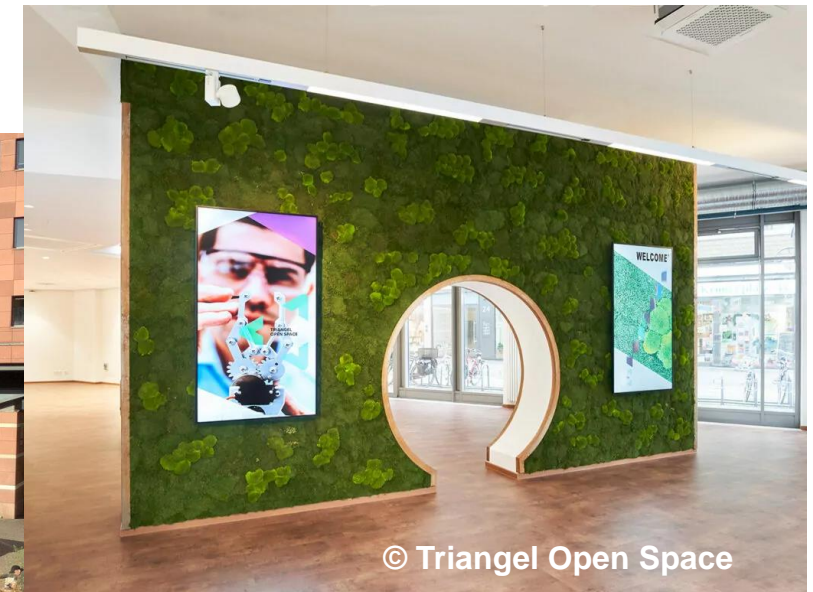


■ Triangel Open Space

- „SPACE TO CREATE - A place for inspiration, creativity, exchange and collaboration at the interface of science, business and society.”
- In the center of Karlsruhe, close to University

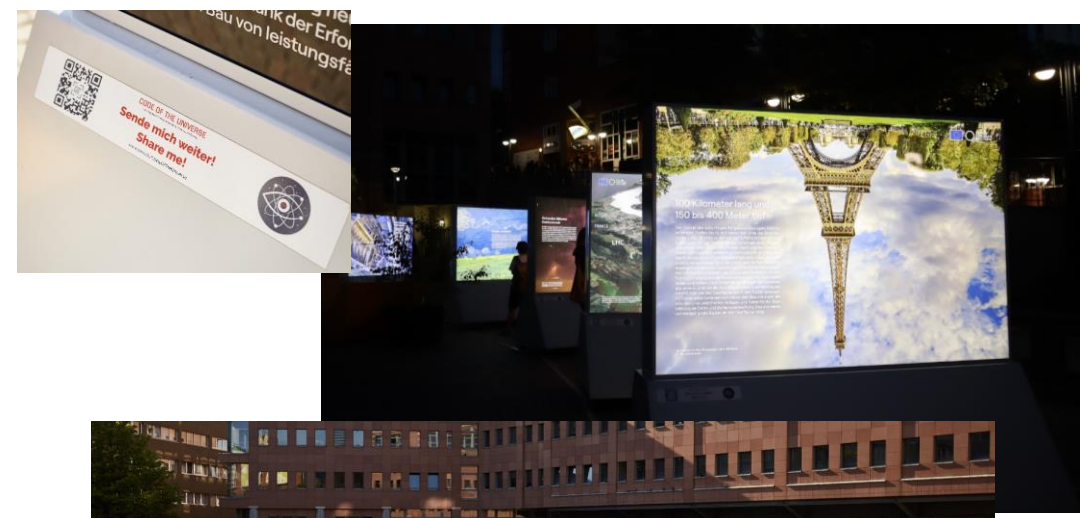
■ Kronenplatz

- Public space



Code of the Universe

- Travelling photo exhibition from CERN
- Illuminated panels with photographs
- Promote FCC
- Share stories
 - Understanding the universe ↔ scientific/ technological breakthroughs
 - Journey through the past
- Extended with local panels
- Vernissage with KIT vice president and mayor of Karlsruhe



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EFFEKTE series

- Evening lecture series organised by City of Karlsruhe
- One evening included in KCETA event summer
 - Topic „Antimaterie, Dunkle Materie, neue Materie?“
- Three 20min talks followed by discussion and exhibition



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Events for Pupils



- Three public Masterclasses (CMS, IceCube - cancelled, Belle II)
- One non-public event for primary school



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Podium discussion

- „Kommen große Forschungsinfrastrukturen an ihre Grenzen? Neue Energiekonzepte für die Forschung der Zukunft“

"Are large research infrastructures reaching their limits? New energy concepts for the research of the future".

- Combined with opening of KITTEN (joint test field of KARA and Energy Lab 2.0)
- Cooperation with Badisches Staatstheater



Afternoon Science

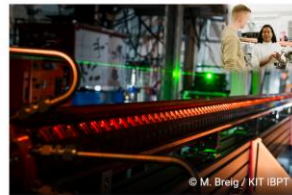


- 11 topics on 11 afternoons
- One afternoon for each research field, self-reliant organization by each group
- Exhibition, hands-on experiments, posters, short talks, ...



KATRIN - die empfindlichste Waage der Welt

[Details](#) →



Teilchenbeschleuniger von morgen – designed @ KIT

[Details](#) →



Detektoren und Elektronik, um Unsichtbares sichtbar zu machen

[Details](#) →



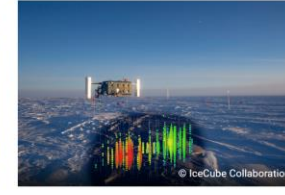
Antimaterie, dunkle Materie, neue Materie? – Teilchenphysik in Japan

[Details](#) →



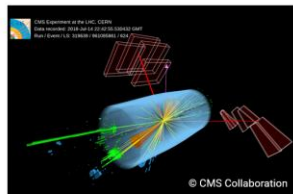
Kosmischen Superbeschleunigern auf der Spur

[Details](#) →



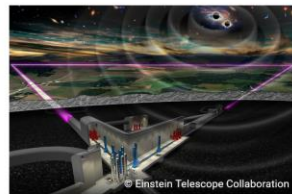
Das IceCube Observatorium – Am kalten Südpol das heiße Universum erforschen

[Details](#) →



Was macht eigentlich das Higgs-Teilchen?

[Details](#) →



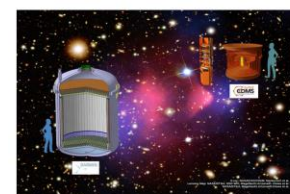
High-Tech für Teilchenbeschleuniger und Gravitationswellenexperimente

[Details](#) →



Von klein zu groß – wie man in der Teilchenphysik neue Erkenntnisse aus großen Datenmengen gewinnt

[Details](#) →



Dunkle Materie als Schlüssel zum Code des Universums

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Quantensensoren – „Coole“ Schlüsseltechnologie für Präzisionsexperimente

[Details](#) →



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Summary



- Very successful event!!
- Cooperation of different organizers
- Coordination with different scientific groups
- Each group made huge effort → can be re-used for future events
- Always well attended despite 38°C
- Regular visitors who were there almost every day, but also random visits

Great experience for the organizers, the scientists and the public

Thank you!

