

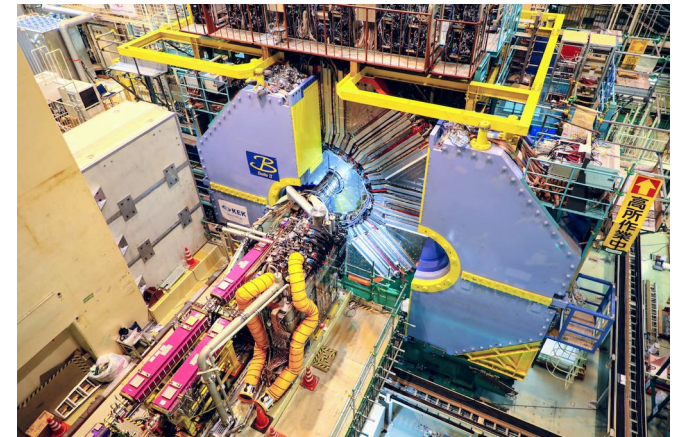
Freitag, 23. Juni 2023, 13 Uhr c.t. im Hörsaal I des Physikalischen Instituts



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„The invisible universe in the laboratory“



There is overwhelming indication that we do not understand our universe. Experimental evidence points to the existence of so-called Dark Matter that makes up a 85% of all mass but does not interact with ordinary matter except through gravity. Many experiments are underway to shed light on this so-called „dark sector“ of physics, using various techniques and technologies to probe for signs of new particles or new interactions.

In this talk, I will explain the main strategies and challenges of searching for dark matter at particle colliders, where high-energy and high-intensity collisions can potentially produce dark sector particles. I will also review the latest results from some of the leading experiments in this field and discuss their implications and prospects for unraveling the mystery of dark matter.