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Neutrino Beams

Monday, April 15, 2024 1:30 PM (1 hour)

Neutrinos are the only particles that easily elude the Standard Model description. Due to their non-zero mass, effects like neutrino oscillations have been observed, which are clear indicators of Beyond Standard Model physics. With so many unknowns, accelerator neutrino beams offer a clean testbed for experiments that would like to further understand the underlying physics. We will shortly introduce neutrinos and their characteristics, talk about experimental techniques on neutrino detection, then look at the concept of neutrino beams with some examples, and finally, via a short deviation to the CERN test beam facilities for neutrino detector R&D, go to the latest developments on monitored and tagged neutrino beams.

Presenter: BERNHARD, Johannes (CERN)

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