11th Beam Telescopes and Test Beams Workshop



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Irradiation and test beam facility PARTREC in Groningen, NL

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After 25 years of successful research in the nuclear and radiation physics domain, the KVI-CART research center in Groningen is upgraded and re-established as the PARticle Therapy REsearch Center (PARTREC). Using the superconducting cyclotron AGOR and being embedded within the University Medical Center Groningen, providing proton beams of up to 190 MeV and ion beams (up to Pb) with energies up to 90 MeV/nucleon. The intensity of the continuous beam can be varied between several hundreds of particles per second to about 1 microAmp. A number of further upgrades, scheduled for completion in 2023, will establish a wide range of irradiation modalities, such as pencil beam scanning, shoot-through with high energy protons and SOBP for protons, helium and carbon ions. PARTREC delivers a variety of proton and ion beams and infrastructure for detector tests and radiation hardness experiments conducted by scientific and commercial communities, and nuclear science research in collaboration with the Faculty of Science and Engineering of the University of Groningen.

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