

The physics programme at the PS and SPS: CERN's unique scientific breadth

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While the main focus over the past years has shifted towards flagship experiments at colliders, a rich and exciting physics programme is carried out at the CERN Proton-Synchrotron (PS) and Super-Proton-Synchrotron (SPS), attracting large scientific communities from the various fields of physics.

In my talk I will introduce the CERN PS and SPS accelerators which are successfully and efficiently operating since many years and which are providing a wide range of different particle beams. These beams with energies up to 450 GeV are used in various experimental facilities like the Antiproton Decelerator, the Neutron Time-of-Flight facility, the PS and SPS experimental areas and at the CNGS beamline which provides a beam of high-energy neutrinos to the Gran Sasso laboratory about 730 km away from CERN.

I will present an overview on the physics programme of CERN's "lower energy" accelerators and will report on its experiments. As the PS and SPS also serve as injectors for the Large Hadron Collider LHC, I will review their operation modes and possible injector upgrades which will ensure to keep CERN's unique scientific breadth and that the experiments at the PS and SPS will remain an important and indispensable part of the laboratories activities.