

## 7th Beam Telescopes and Test Beams Workshop



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# Two New Low Energy Beam Lines at the CERN North Area: from Design to Commissioning

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The CERN North Area facility at the Super Proton Synchrotron (SPS) provides secondary beams for numerous fixed target experiments and test beams. Recently, the available beam line spectrum has been enriched by two new tertiary branches of the existing beam lines designated as H2-VLE and H4-VLE. They are designed to provide low-momentum charged particles in the range of 0.3 to 12 GeV/c. Their individual properties, e.g. momentum and time-of-flight, can be determined by the instrumentation employed. With extensive beam dynamics studies, the particle transmission throughout the beam lines has been optimized and fully detailed Monte Carlo simulations have been performed to estimate the rates and compositions of the beams. This presentation gives an overview of the beam line design and instrumentation and the very good agreement between the Monte Carlo studies and first results of the commissioning is discussed.

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