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## Measurements of Coherent Interactions in Silicon Bent Crystals with 400 GeV Proton at CERN H8

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The UA9 experiment is investigating the feasibility of crystal-assisted collimation for high-energy hadron colliders. A crucial milestone towards this goal is the characterization of single-pass response of crystals with high-energy hadron beams. At CERN, this is done by using beams from the Super Proton Synchrotron (SPS) extracted at 400 GeV/c in the H8 extraction line for fixed-target experiments. Since 2009, a couple of dozens crystals of different technologies and parameters have been tested. For the first time, a complete and systematic analysis of all the crystals tested in H8 has been carried out. The results of this work are presented, providing a unique set of data that is being used to benchmark several crystal simulation codes developed by different teams.

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