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## Experience with multi-TeV beam channeling and crystal extraction at the LHC

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Bent crystals have been recently installed in the Large Hadron Collider for halo collimation studies. The first tests performed with hadron beams demonstrated channeling with good efficiency at energies up to 6.5 TeV and provided an initial feedback on the operation of crystals that are integrated in the transverse hierarchy of the LHC collimation system. Data collected also provide a benchmarks of simulation tools developed for predicting crystal-based collimation. In this contribution, the possibility to use crystal extraction for in-beam and external fixed targets at the LHC is discussed. Predicted performance for some example layouts are presented and ideas for further beam tests towards a demonstration of this concept are proposed.

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