

Channeling 2018



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Bent Crystals for Large Angle Deflection of TeV Particle Beams

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Bent crystals can be efficiently employed to steer high energy particles via channeling. To achieve optimal performances several strict conditions must be satisfied, such as a homogeneous curvature and a high lattice quality. While for small bending angles up to few hundreds of microradians several solutions have already been deployed, for larger deflection angles in the range of 1-15 milliradians novel approaches must be devised. In this talk configurations exploiting the primary curvature will be reported, as well as new manufacturing processes for the holders and the crystal sample production. Also prototype samples and the curvature achieved will be presented

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