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Tevatron Collider Collimators and Absorbers

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Beam collimation is mandatory at any superconducting collider to protect components against excessive irradiation, minimize backgrounds in the experiments, maintain operational reliability over the life of the machine,

and reduce the impact of radiation on environment, both at normal operation and accidental situations. Highly-efficient two-stage collimation system at Tevatron reliably serves these purposes.

The system evolution over 25 years is described. Recent developments include marble shells and crystal collimation.

The later, gives a possibility to test channeling techniques in a collider as an interesting option for LHC. External and internal Tevatron collider beam absorbers are described. They also exhibit high performance.

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