## Beam loss monitors in the collimation

- To phases of collimator operation:
  - single collimator adjustment (losses occur only at one collimator)
  - multi collimator loss observations (losses occur at more than one collimator)

## TO

- 1. Use of ionisation chambers
  - 1. Ionisation chamber dimensions: diameter = 90 mm, length = 600 mm
  - 2. Distance to the beam max about 350 mm.
  - 3. Distance to collimator (back surface) about 300 mm
- 2. Use of secondary emission monitors (SEM)
  - 1. SEM dimensions: diameter = 90 mm length = 225 mm
  - Distance to the beam max about 100 mm
  - Distance to collimator (back surface) about 300 mm