

## Validation of the CLIC alignment strategy on short range

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The pre-alignment of CLIC consists in aligning the components of linacs and beam delivery systems (BDS) in the most accurate way possible, so that a first pilot beam can circulate and allow the implementation of the beam based alignment. Taking into account the precision and accuracy needed: 10 microns rms over sliding windows of 200m, this pre-alignment must be active and it can be divided into two parts:

- the determination of a straight reference over 20 km, thanks to a metrological network
- the determination of the components positions with respect to this reference and their adjustment.

The second part is the object of the paper, describing the steps of the proposed strategy: firstly the fiducialisation of the different components of CLIC; secondly, the alignment of these components on common supports and thirdly the active alignment of these supports using sensors and actuators. These steps have been validated on a test setup over a length of 4m, and the obtained results are analyzed.

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