

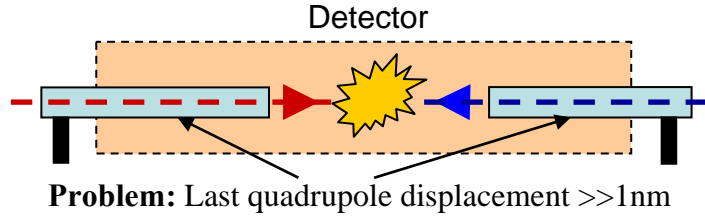
Linear collider

$$L = \frac{K}{\sigma_x \cdot \sigma_y} = 10^{34} \text{ cm}^{-2} \text{ s}^{-1} \text{ (CLIC)}$$

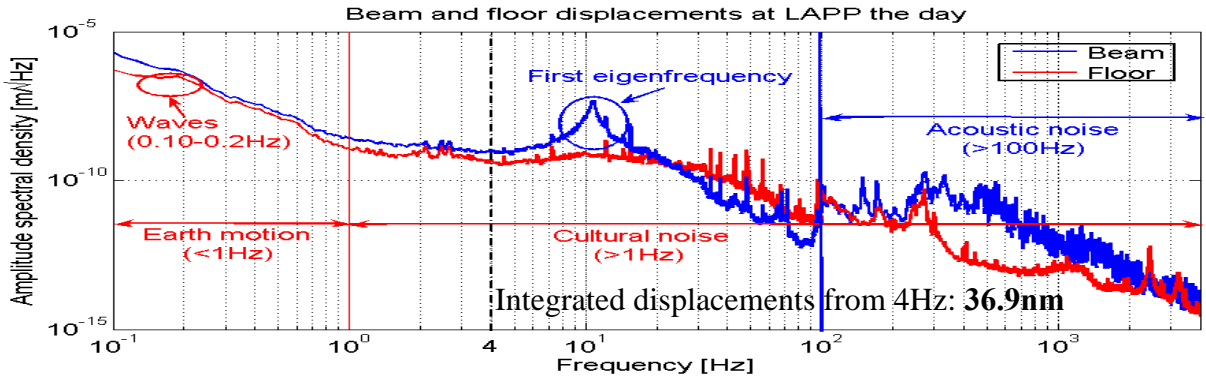
Fixed machine parameters

Transverse beam sizes

Beam vertical size $\sigma_y = 1 \text{ nm}$

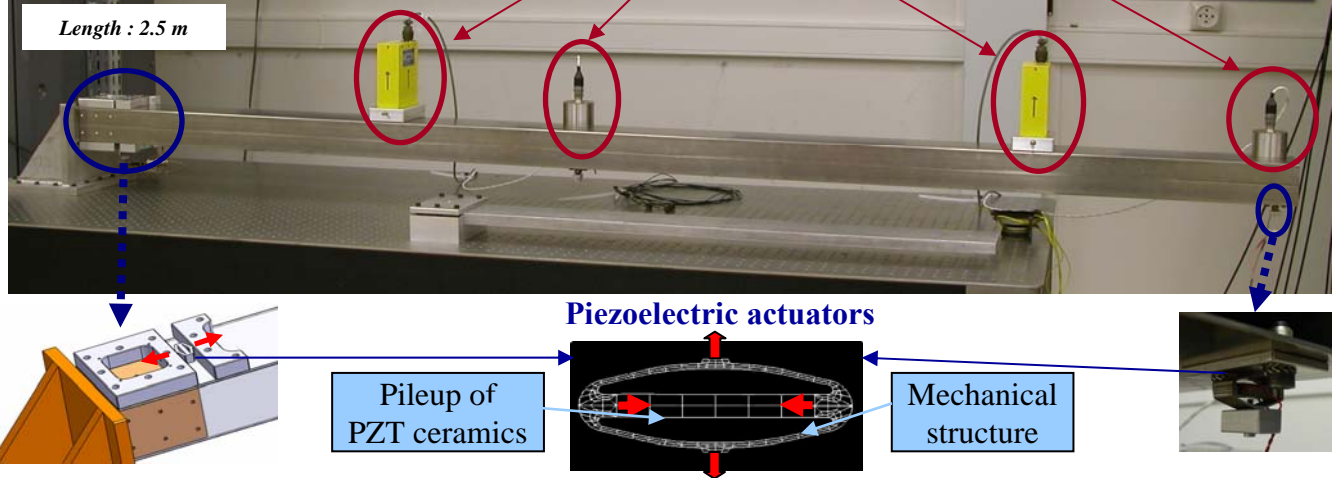


What makes the two last quadrupoles move?

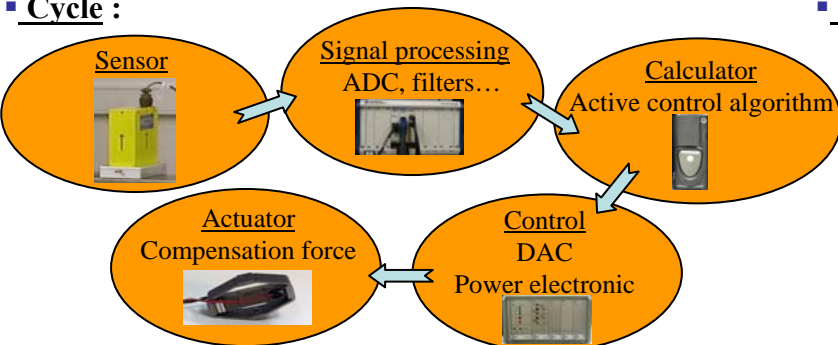


→ Goal: Stabilisation of quadrupoles at 1/3 of nanometre

Real size prototype: Measurement of the structure vibrations (Sensors: Geophones, accelerometres...)



Cycle :



Results obtained at the micrometre scale:

