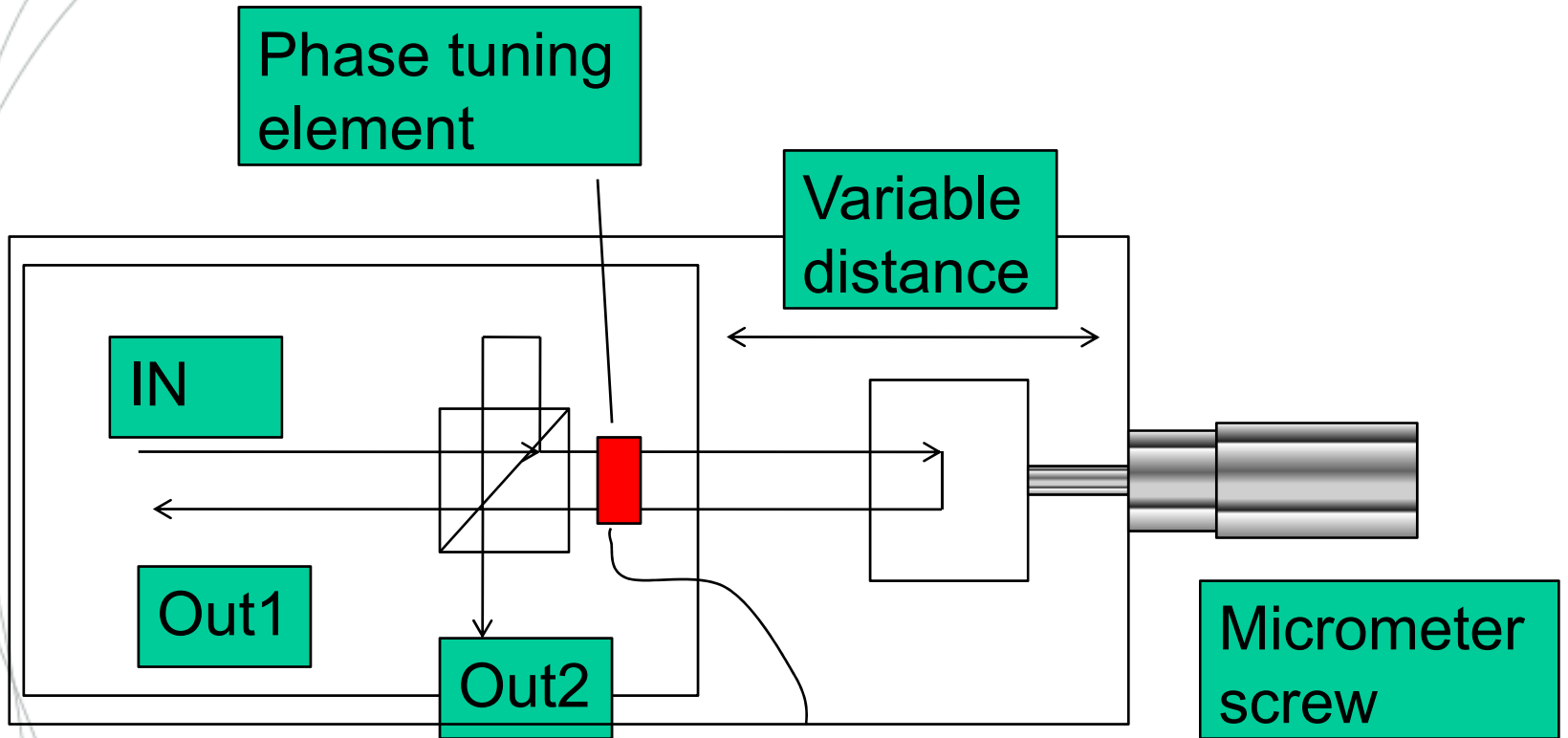


# **KYLIA**

**WT MINT principles**

# Optical layout



- Micrometer screw for FSR tuning
  - » 0 to 20mm (0 to 130ps delay or FSR from 7.5 GHz to infinite)
  - » 10 $\mu$ m reading precision (70fs)
  - » Repeatability  $\pm 3\mu$ m ( $\pm 20$ fs)
  - » Continuously tunable

# Phase tuning

- U :ultrafast response, piezo based.
  - » Helpful for fast shifting systems ( instability of the laser for instance).
    - The dli can adapt itself instantaneously to the environment, if a closed loop between BER and phase shifting (for instance) is set up. This solution is mainly used in labs.
  - » Tuning  $0.03\mu\text{m}/\text{V}$  ; 1FSR for 52 V
  - » Tuning speed 0->100%  $20\mu\text{s}$
- L: Low voltage required, heater based.
  - » for slow drifting environments (thermal effects).
    - This is the solution deployed on the field.
  - » Tuning  $0.2\mu\text{m}/\text{V}^2$  ; 1FSR for 3V
  - » Tuning speed 0->50% 1s.

