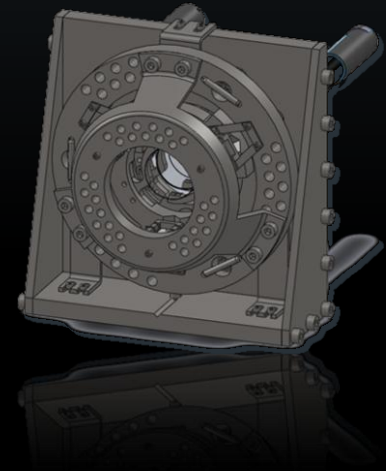
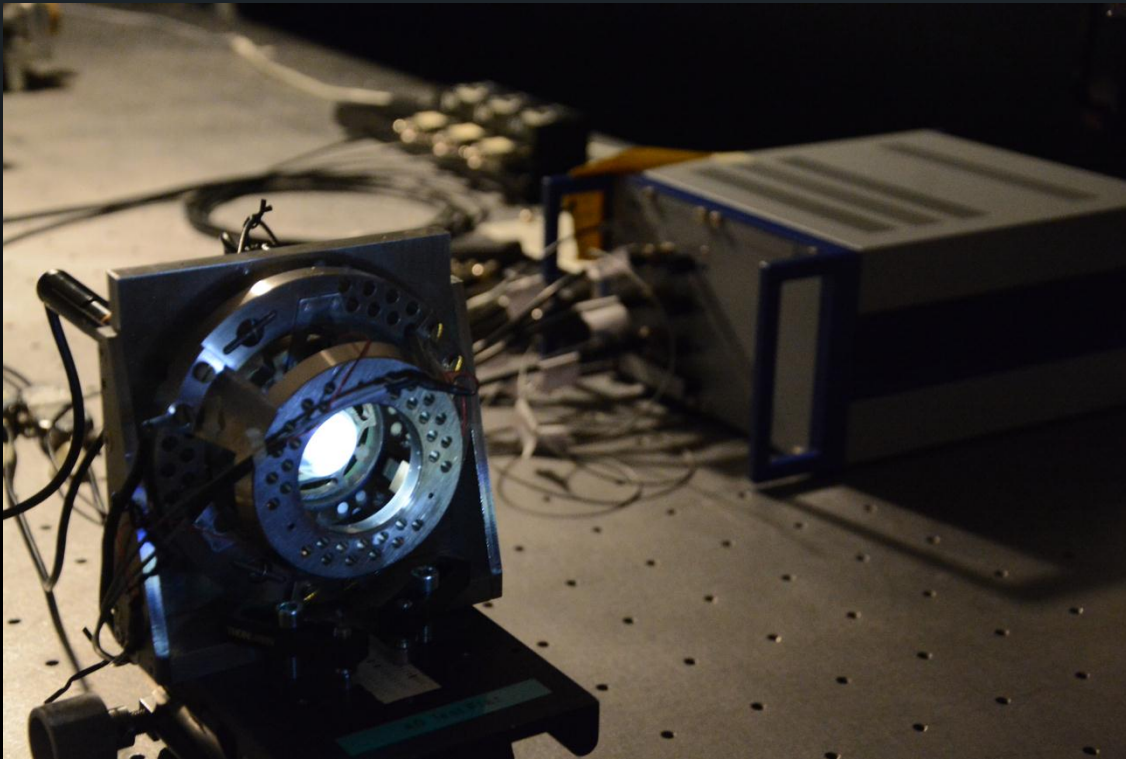




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L. Giovannelli, F. Berrilli, D. Del Moro, V. Greco, A. Sordini, R. Piazzesi, M. Stangalini,

# The LUTIN Fabry-Pérot Prototype In 5 #hashtag





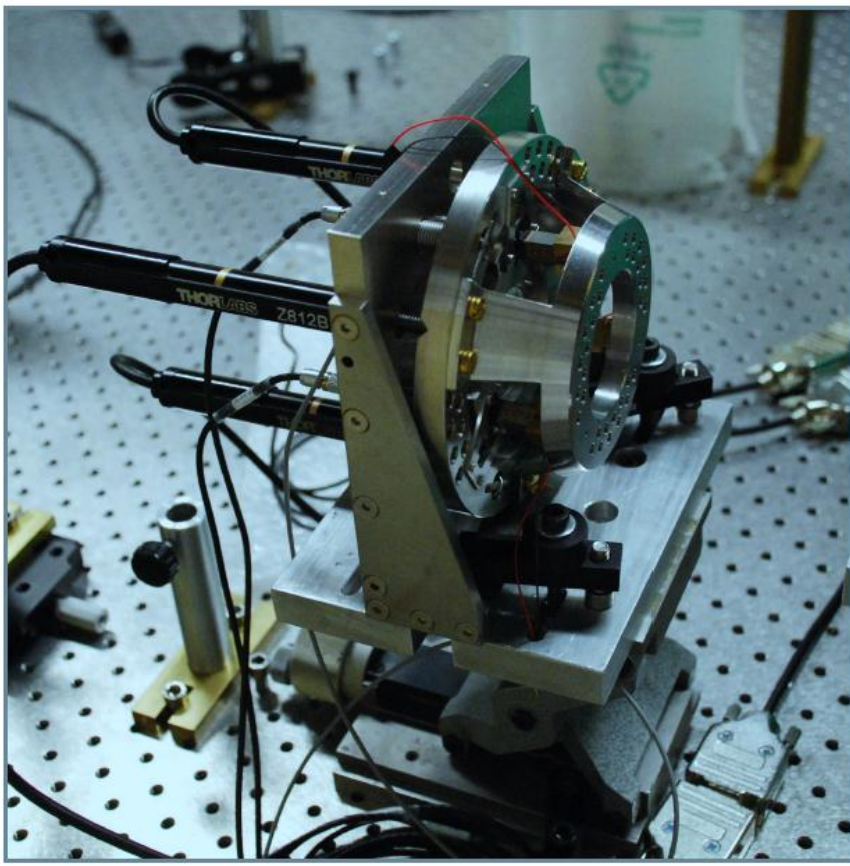
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## #1 FPI

### Fabry Pérot Interferometer



Optical Cavity Spacing: 1 mm

Step: 10 nm (d) – 7 pm ( $\lambda$ )

Finesse: 19

FSR: 0.2 nm

FWHM: 0.01 nm

Resolving power: 58 000



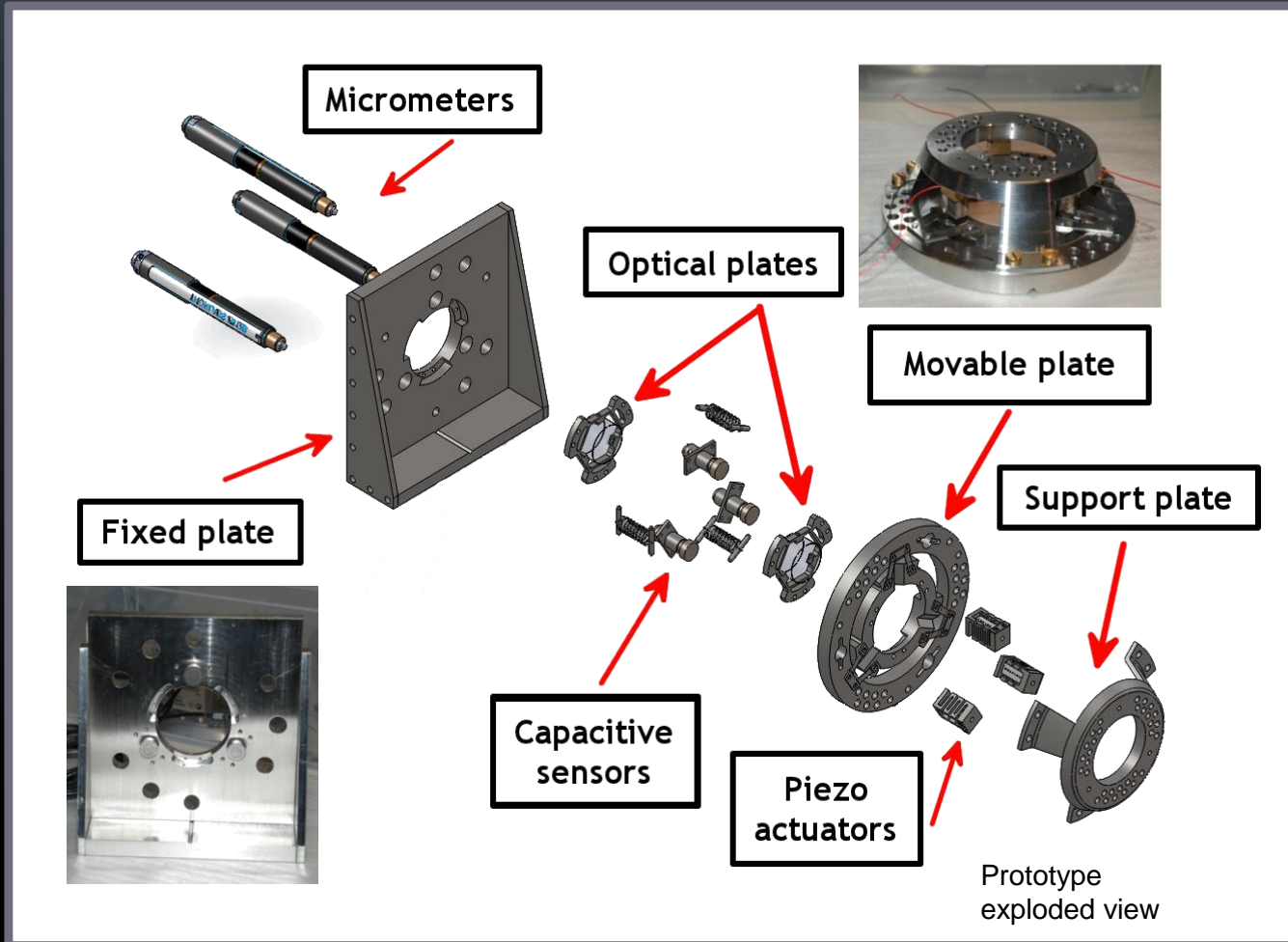
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## #2 CSE

### Capacitance Stabilized Etalon



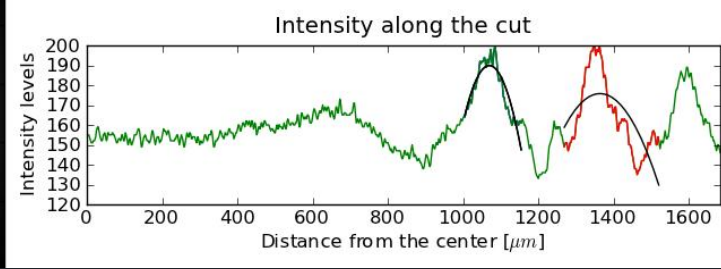
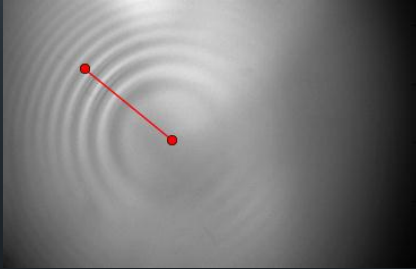


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## #3 Spectral Stability



Centerband shift, typical RMS over 1 hour:

$1 \text{ pm}$

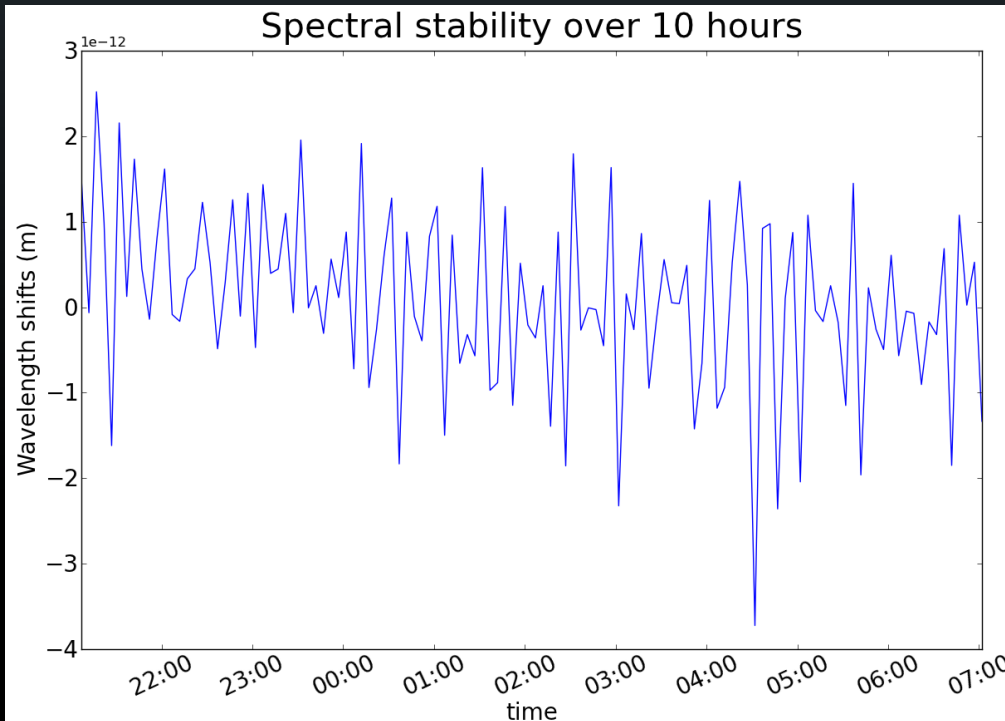
Centerband wavelength, PV shift:

$< 5 \text{ pm/h}$

PV shift expressed as doppler signal:

$< 250 \text{ m/s}$

[Giovannelli et al. 2014a]



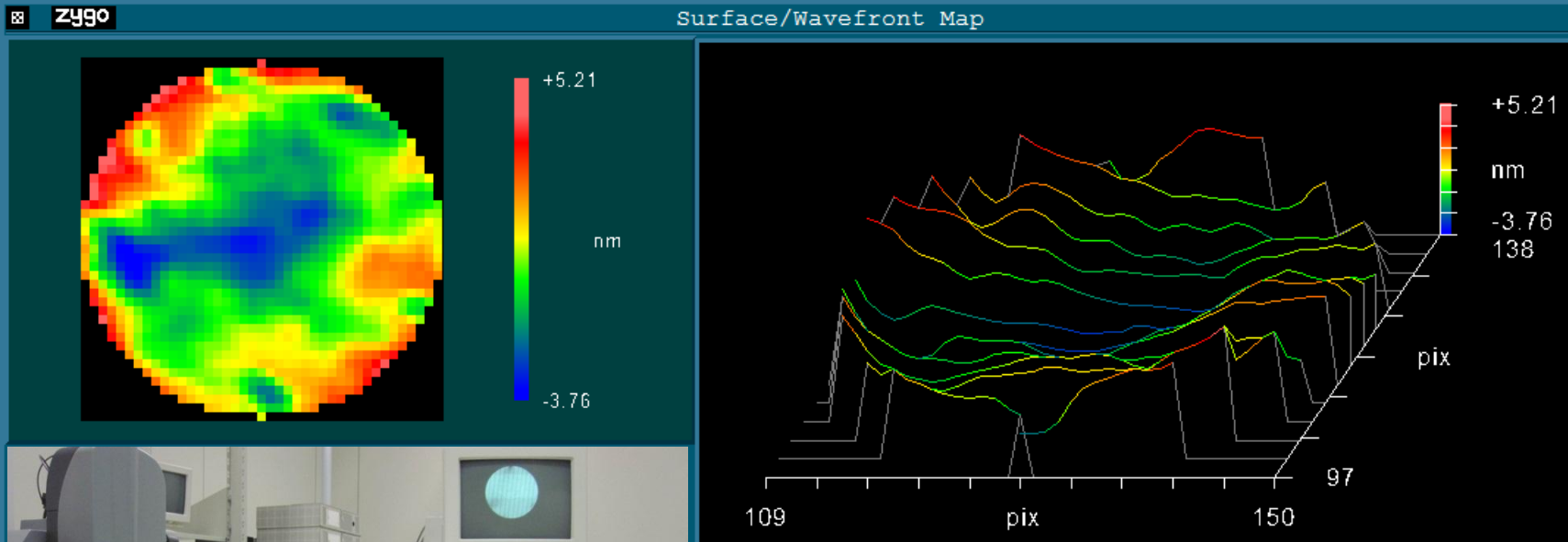


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## #4 Optical Surface Errors

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Istituto Nazionale di Ottica (Arcetri)

Measures over a diameter of 23 mm:

PV error = 9 nm

RMS error = 1.603 nm

$\lambda/70$  @ 632.8 nm

[Giovannelli et al. 2014b]

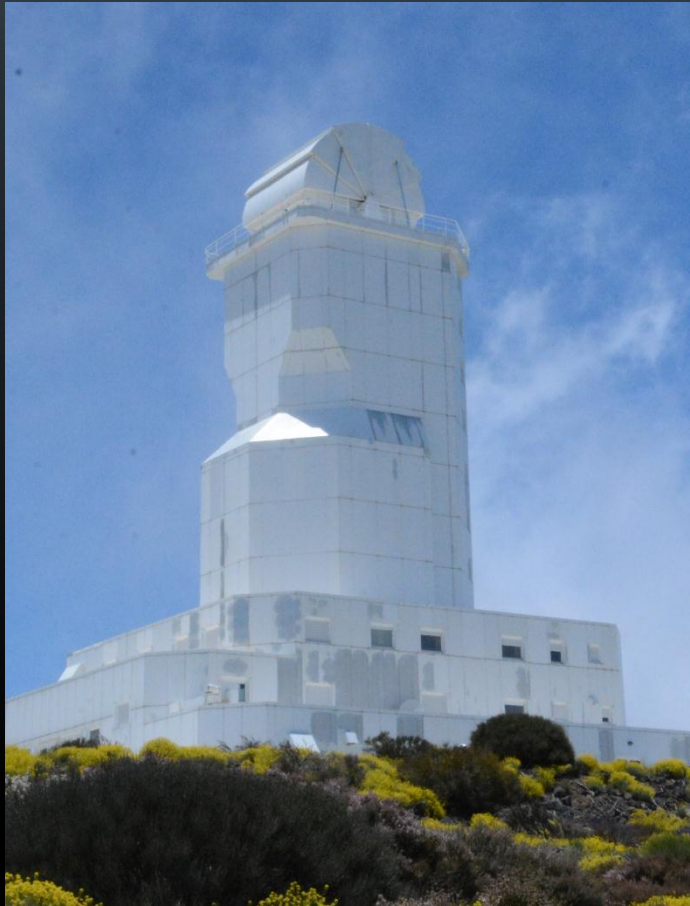


# LUTIN

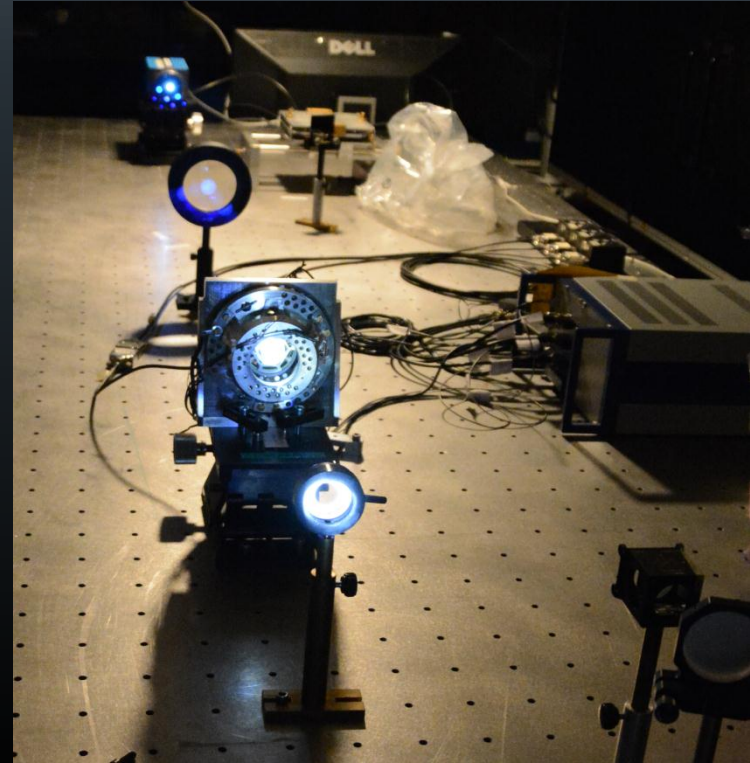


## #5 First Light

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VTT @ Tenerife 23-30 May 2016



LUTIN during observations  
@ VTT, 23-30 May 2016  
SOLARNET accesses time