

## Determining the wavelength of the light of an He-Ne laser using a Fabry-Perot interferometer

Numero P5.3.5.3



### Descrizione

In the experiment P5.3.5.3 the mirrors on the laser base plate are arranged to set up a Fabry-Perot interferometer with two parallel mirrors in line. The first semi-transparent mirror splits the light beam, while the second fully reflective mirror reflects the light back to overlap with the first reflected beam. Moving the second mirror will change the length of the resonator, thus changing the interference pattern and enables the measurement of the laser wavelength.

### Dispositivi

Richiesto	Dispositivo
0/1	Laser optics base plate
0/1	He-Ne laser, unpolarised
0/1	Laser mount
0/5	Optics base
0/2	Beam divider, 50 %
0/2	Holder for beam divider
0/1	Planar mirror with fine adjustment
0/1	Fine adjustment mechanism
0/1	Spherical lens, $f = 2.7$ mm
0/1	Screen, translucent
0/1	Saddle base
0/1	Metal rule, 1 m