

## P5 Optics

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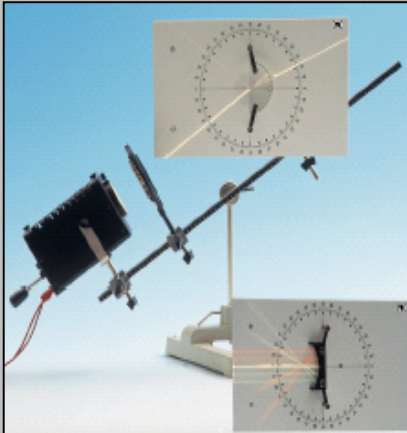
- P 5.6.1 Measurement according to Foucault and Michelson
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### **P 5.7 Spectrometer**

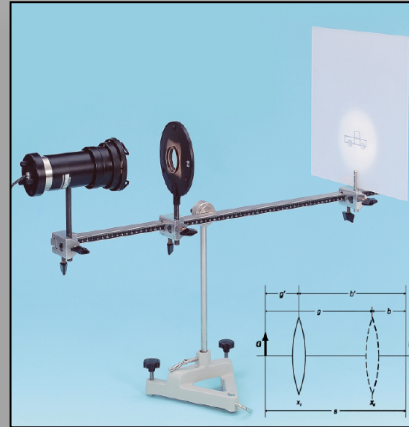
- P 5.7.1 Prism spectrometer
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## P5 Optics

### P 5.1 Geometrical optics

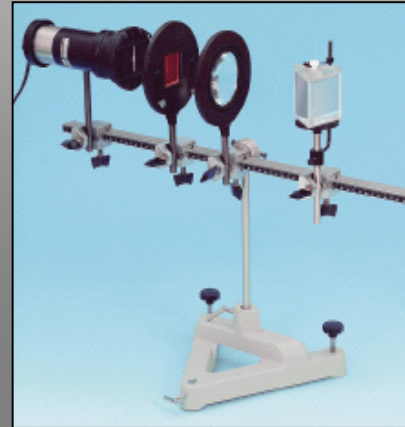


Reflection & refraction



Determining the focal lengths at collecting lenses using Bessel's method

### P 5.2 Dispersion & Chromatics

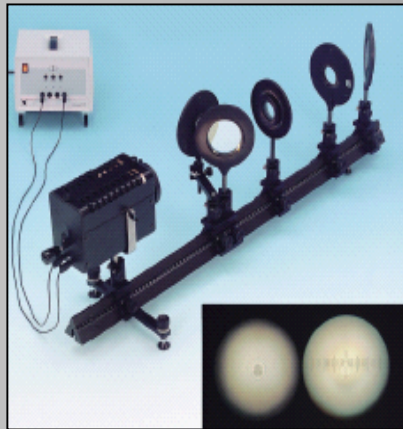


Refractive index and dispersion

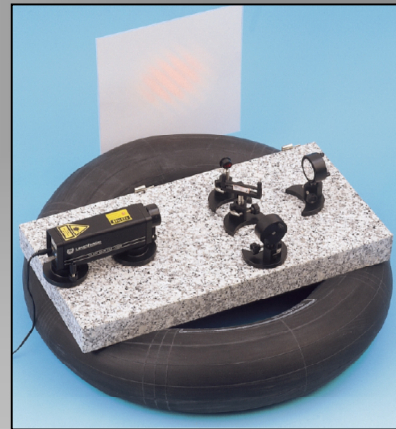


Newton's experiment on the non-dispersible nature of spectral colors

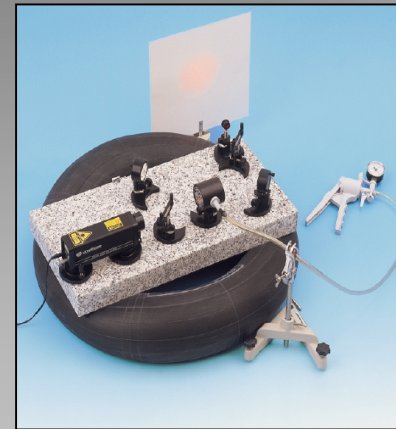
### P 5.3 Wave Optics



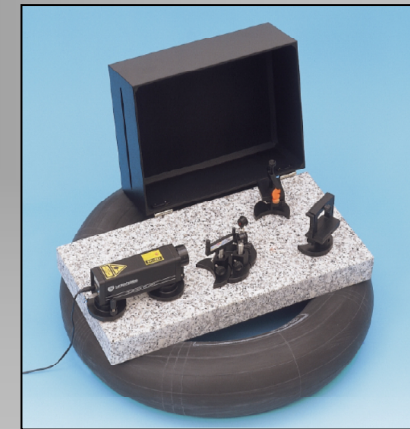
Newton's rings



Michelson interferometer



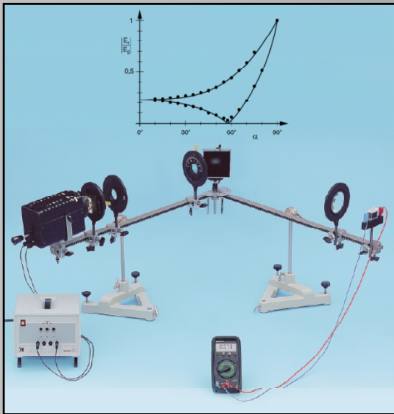
Mach-Zehnder interferometer



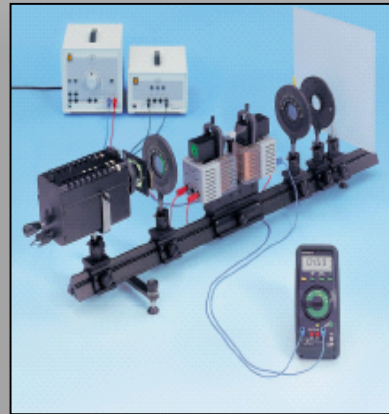
Creating transmission holograms on the laser optics base plate

## P5 Optics

### P 5.4 Polarization



Fresnel's laws of reflection



Faraday effect

### P 5.5 Light Intensity



Determining the luminous intensity as a function of the distance from the light source – Recording and evaluating with CASSY

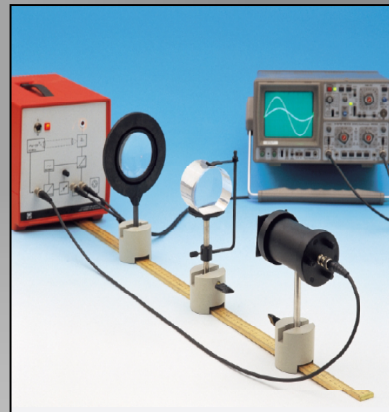


Stefan-Boltzmann law: measuring the radiant intensity of a "black body" as a function of temperature

### P 5.6 Velocity of light

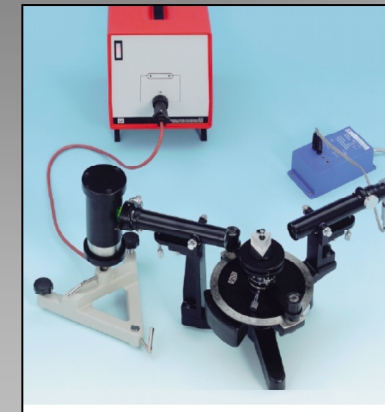


Determining the velocity of light according to Foucault and Michelson

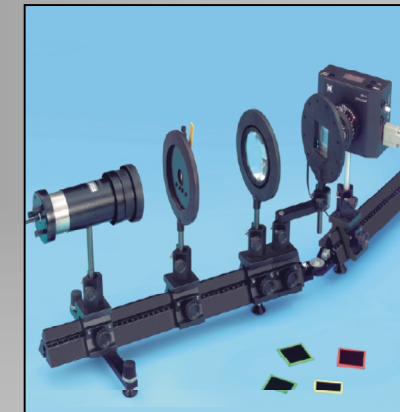


Determining the velocity of light using a periodical light signal and a short measuring distance

### P 5.7 Spectrometer



Measuring the line spectra using prism spectrometer



Assembling a grating spectrometer for measuring transmission curves