

# AS and A-level Physics practicals: Equipment set up

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Practical 2: Investigation of interference effects to include the Young's slit experiment and interference by a diffraction grating

Part 1: Double slit separation

V1.0 – September 2016

Contribution from Marcin Poblocki, Senior Physics Technician at Manchester Grammar School

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# Setting up the apparatus as in the diagram

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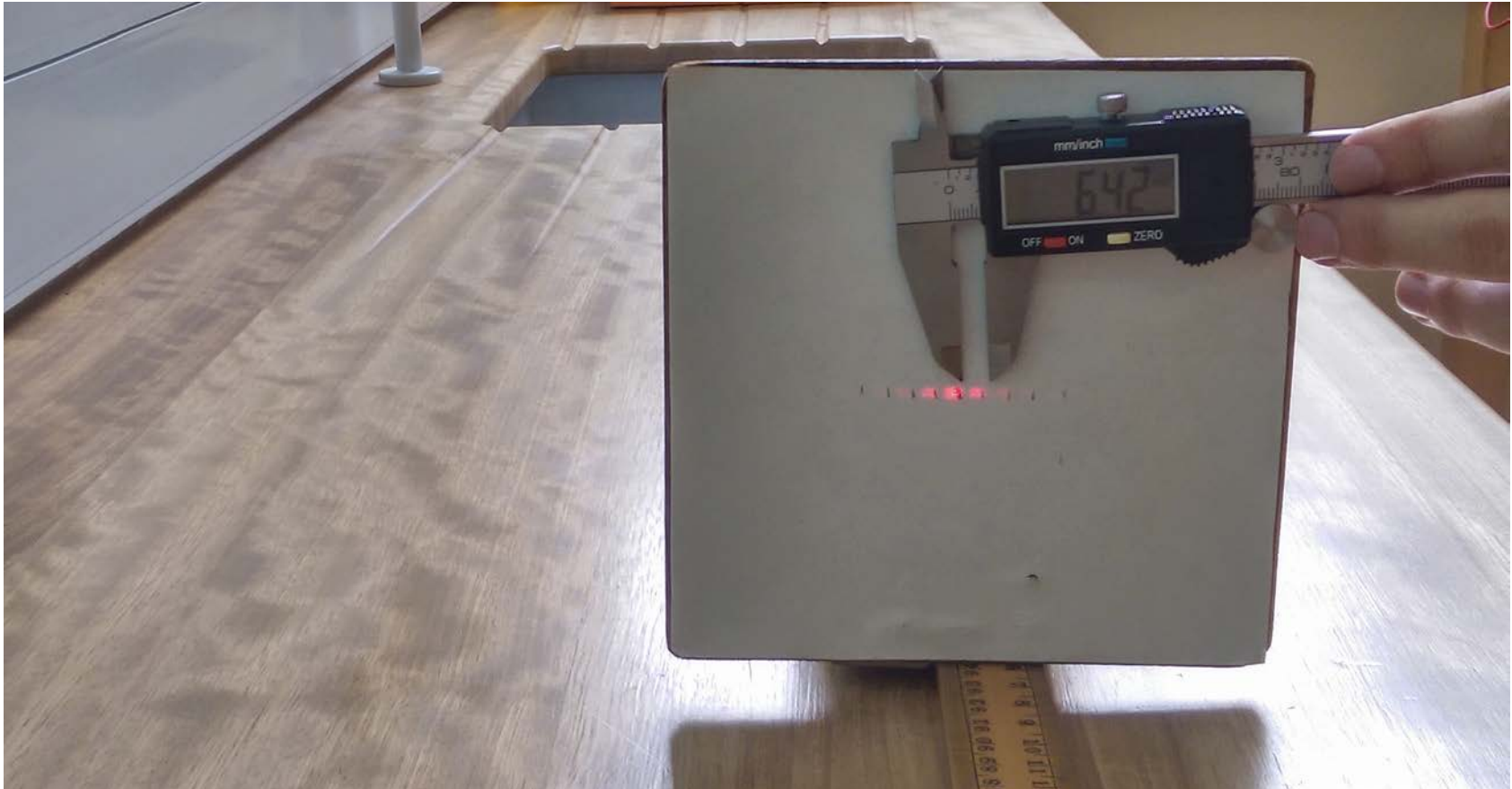
# The laser is now positioned...



...and illuminated



A measurement of the slit separation can be taken using vernier calipers, for example



Fringe width can be measured more easily in a darkened laboratory

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Practical 2 - Part 2: Diffraction with a plane transmission  
diffraction grating at normal incidence

V1.0 – September 2016

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The apparatus set up as in the diagram

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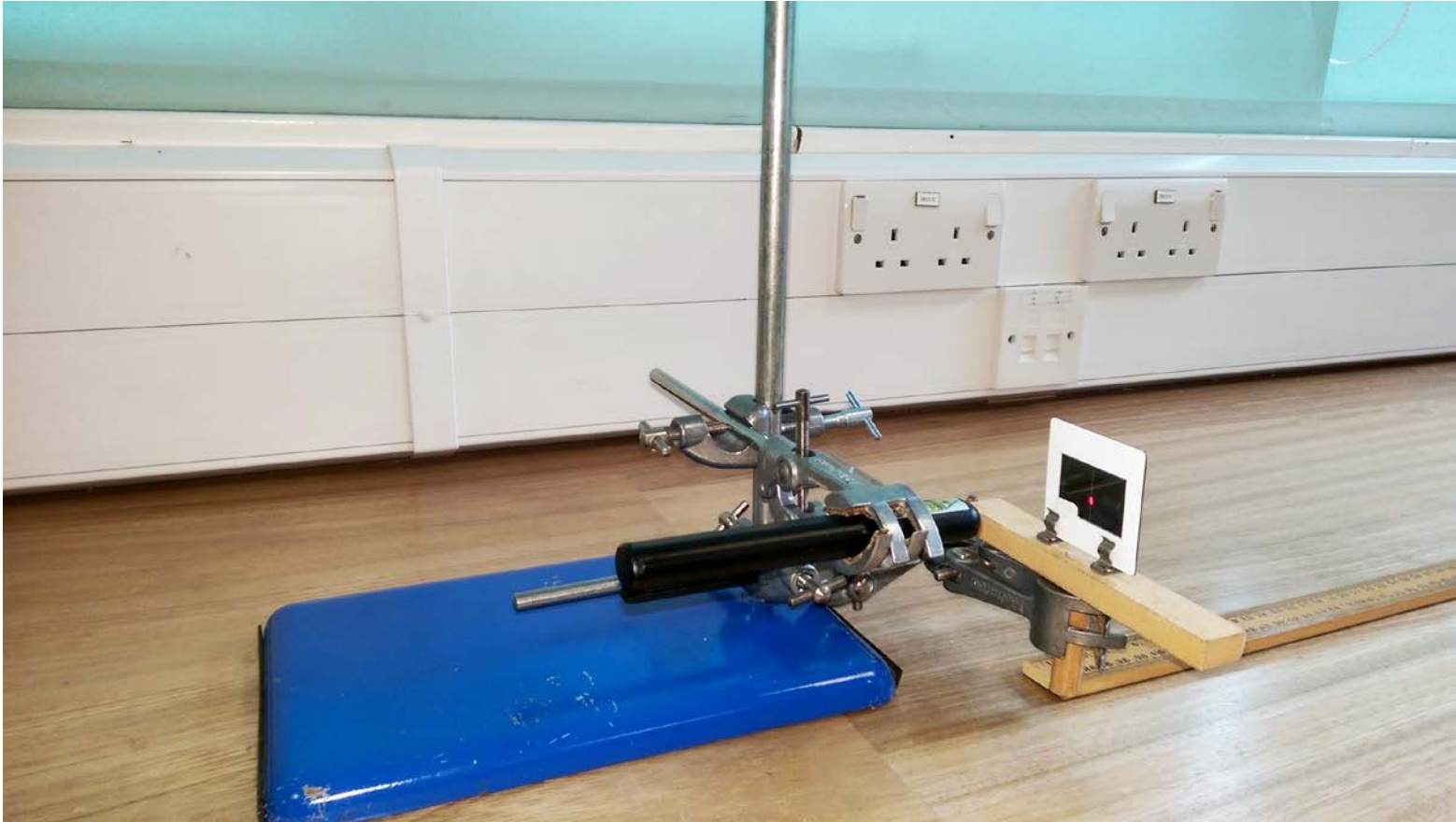


# Placing the diffraction grating perpendicular to the beam of light ....

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...now seen in the correct position



# Measuring distances with vernier calipers, for example, to allow calculation of angles

