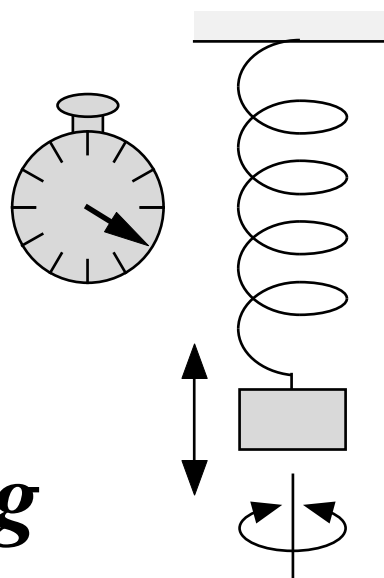


Liverpool Physics Olympics  
INTERNATIONAL **98**



# *Wilberforce Spring*

**Aim** To determine the time interval (*ie*, the period) between consecutive instances when the motion of the Wilberforce spring is purely rotary or purely up and down.

**Materials** Wilberforce spring  
Clock, reading to 1 s

**Method** The Wilberforce spring is set into motion by a judge pulling down the bob and then releasing it. This is done first for a period of 10 minutes, during which time the teams observe the motion and plan how they will carry out the timing. The Wilberforce spring is then set into motion again for the teams to carry out their timing.

**Conditions** No other timing devices may be used.

**Time limit** 25 minutes

**Ranking** The ranking order will be determined by the difference between the measured and the actual time interval.

**Team**

**Period**

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Do not write below line

**Difference**

**Rank**