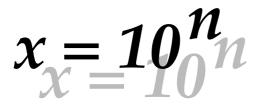
## LIVERPOOL PHYSICS OLYMPICS





## Fermi Quiz

*Aim* To estimate the values of various quantities

Method

- For each of the questions listed on the next sheet, give the *integer* closest to the *base 10 logarithm* of the answer (*i.e.* if the answer is  $10^n$ , give n to the nearest integer)
- The mark given to each question will be the difference between the value given and the correct value

**Conditions** 

- The answer must be given in the units specified
- For those quantities that must be guessed the judge's decision is final (*i.e.* the judge is always right, even when he's wrong)

*Time limit* To be completed by the end of the fourth event

**Ranking** The ranking order will be determined by the sum of the marks for all of the questions – the lowest marks get the highest rank