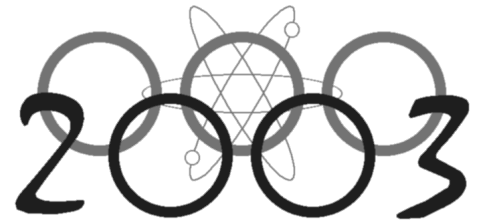


LIVERPOOL PHYSICS OLYMPICS



Team

Rank

Fermi Questions

- 1 In June next year Venus will transit (pass in front of) the Sun.
By how much does the Sun appear to dim during such a transit? %
- 2 How many molecules are there in a rain drop?
- 3 Astatine is the rarest of the naturally occurring elements.
What is the total mass of astatine in the Earth's crust? kg
- 4 How many people use the Internet?
- 5 The spacecraft Voyager 1 is the most remote man made object.
How far away is it from Earth? m
- 6 What is the resistance of the tungsten filament in a 100 watt
light bulb when it is switched on? ohms
- 7 The Leonid meteor shower occurs every year in November.
How fast does such a meteor enter the Earth's atmosphere? m/s
- 8 What is the top speed of the world's fastest diesel locomotive? m/s
- 9 How much personal computer time has been used in total in the
Search for Extraterrestrial Intelligence (SETI)? years
- 10 To how many decimal places has pi been calculated?
- 11 What is the deepest hole bored into the Earth's crust? m
- 12 How many bits can a standard DVD hold?
- 13 How many standard-sized postage stamps would it take to
completely cover the Earth?
- 14 How many people were in the Beatles?