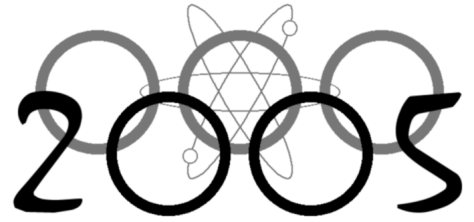


LIVERPOOL PHYSICS OLYMPICS



Team

Rank

Fermi Questions

- | | | | |
|----|---|----------------------------------|-----|
| 1 | How many nanoseconds are there before Liverpool becomes the European Capital of Culture? | <input type="text" value="17"/> | ns |
| 2 | As seen from the Earth the Sun and Moon appear the same size, but what is the ratio of their diameters (Sun/Moon)? | <input type="text" value="3"/> | |
| 3 | At what temperature does nitrogen boil (at atmospheric pressure)? | <input type="text" value="2"/> | K |
| 4 | What is the temperature at the core of the Sun? | <input type="text" value="7"/> | K |
| 5 | How long will it take for a relativistic particle to do a circuit of the Large Hadron Collider (circumference 27 km)? | <input type="text" value="-4"/> | s |
| 6 | What is the typical mass of an asteroid 100 m in diameter? | <input type="text" value="9"/> | kg |
| 7 | How many atoms would it take to cover an area of one square cm? | <input type="text" value="15"/> | |
| 8 | What would be the mass of a film of copper one square cm in area and one atom thick | <input type="text" value="-10"/> | kg |
| 9 | What is the distance from the Sun to the nearest star? | <input type="text" value="17"/> | m |
| 10 | How much energy is released when an electron and positron (anti-electron) annihilate? | <input type="text" value="-13"/> | J |
| 11 | How many stars are there in our galaxy? | <input type="text" value="11"/> | |
| 12 | What is the maximum speed of electrons moving in a metal? | <input type="text" value="6"/> | m/s |
| 13 | How many protons are there in your team? | <input type="text" value="29"/> | |
| 14 | How many people were in The Beatles? | <input type="text" value="1"/> | |