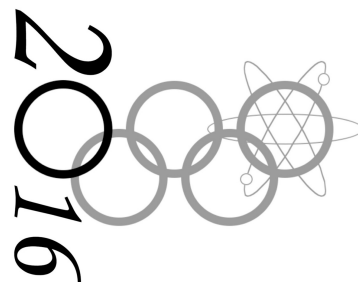


Team**Rank**

Fermi Questions

- | | | | |
|----|--|-----------------------------------|-------------------|
| 1 | How many protons, neutrons and electrons are there in an atom of manganese? | <input type="text" value="2"/> | |
| 2 | What is the volume of a silver atom? | <input type="text" value="- 29"/> | m ³ |
| 3 | What is the sum of the heights of all the participants of all the Liverpool Physics Olympics? | <input type="text" value="4"/> | m |
| 4 | What is the combined mass of 25 nanoparticles each comprising 25 silver atoms? | <input type="text" value="- 22"/> | kg |
| 5 | What is the mass of air inside an LPO mug? | <input type="text" value="- 3"/> | kg |
| 6 | What is the resistance of a silver wire that is 25m long and 25mm in diameter? | <input type="text" value="- 3"/> | Ω |
| 7 | What is the density of metallic silver? | <input type="text" value="4"/> | kg/m ³ |
| 8 | How many atoms are there in 25 silver medals from the Rio 2016 Olympics? | <input type="text" value="26"/> | |
| 9 | A radioactive silver source has a half-life of 40 days. If the mass of silver was 1g during LPO 2012, what mass now remains? | <input type="text" value="- 5"/> | μg |
| 10 | What power is required to heat 25kg of water by 25K in 25s? | <input type="text" value="5"/> | W |
| 11 | What is the combined kinetic energy of 25 apples dropped from rest from a height of 1m? | <input type="text" value="1"/> | J |
| 12 | What is the potential energy due to the electrostatic repulsion between all of the protons in a silver nucleus? | <input type="text" value="- 10"/> | J |
| 13 | What is the deBroglie wavelength ($\lambda=h/p$) of a silver atom moving at 25m/s? | <input type="text" value="- 10"/> | m |
| 14 | How many people were in the Beatles? | <input type="text" value="1"/> | |