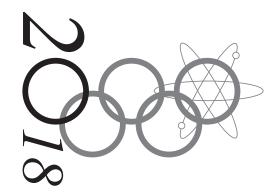
Team	
Rank	



Fermi Questions

1.	How many people were in The Beatles?	1	
2.	What is the time averaged electrical current of a single proton circulating around the LHC?	-15	Α
3.	What is the area enclosed by the orbit of mercury around the sun?	22	m^2
4.	What is the volume of a buckminsterfullerene (aka 'buckyball') molecule?	-26	m^3
5.	What length of Al wire of 27 mm radius is required to make a 27 $\boldsymbol{\Omega}$ resistor?	6	m
6.	What is the wavelength of a gamma ray emitted following the annihilation of a positron with an electron?	-12	m
7.	At what rate do toe nails grow?	-9	m/s
8.	What is the gravitational force between 2 neutron stars at the point just before they merge? (Assume Newton's Law is valid.)	42	N
9.	How many protons are there in an LPO mug full of your favourite drink?	26	
10.	What is the average temperature gradient from the centre of the sun to its surface?	-2	K/m
11.	How many layers of standard Al kitchen foil are required to make a thick enough stack to reach the moon?	13	
12.	What is the momentum of a fully laden Airbus A380 at cruising speed?	8	kgm/s
13.	What is the angular momentum of the moon around the earth?	34	kgm²/
14.	What is the kinetic energy of a sky diver in free fall?	5	J