

Welcome to the MASTERCLASSES QUIZ!

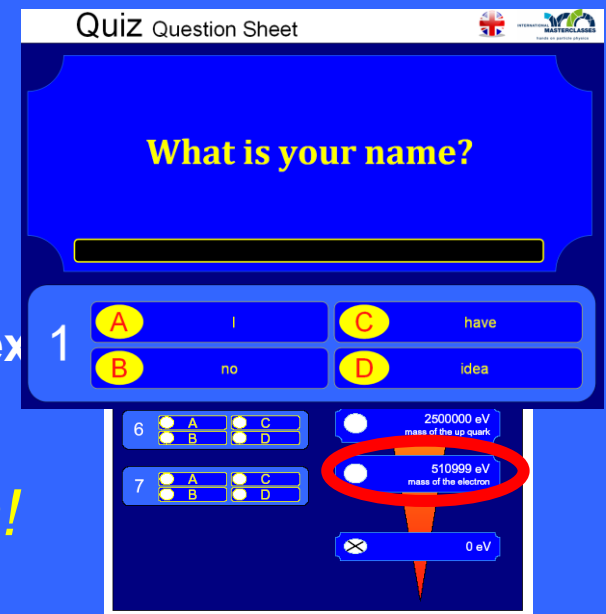
Rules of the Game

- 7 questions, 4 answers to choose (A,B,C,D)
- **mark your answer on your answer sheet before the timer ends!**
- moderators will then reveal the correct answer
- if you have answered correctly, you may **tick off the next energy level**

Let's check which energy level you can reach!

Please note:

- *this quiz is for fun, not for competition!*
- *we won't compare results*



Quiz Question Sheet

What is your name?

1 A I C have
 B no D idea

6 A C
 B D

7 A C
 B D

2500000 eV
mass of the up quark

510999 eV
mass of the electron

0 eV

**Welcome to the
MASTERCLASSES QUIZ!**

Ready?

Quiz Question Sheet





Which particle is the mediator of the Strong Force?



1

A

Neutralino

C

Gluon

B

Snail

D

Pigsino

Quiz Question Sheet





**What percentage
of all the matter and energy
in our Universe do we know
almost nothing about?**



2

A

13%

C

100%

B

96%

D

32.8%

Quiz Question Sheet





Which of the following is an experiment at the LHC?



3

A

ALICE

C

OPAL

B

KATE

D

FLUFFY

Quiz Question Sheet





What is the mass of the Higgs boson, whose potential discovery was claimed in July 2012?



4

A

91 GeV

C

345 GeV

B

173 GeV

D

126 GeV

Quiz Question Sheet





Which of the following technological innovations was invented at CERN?



5

A

The Teleporter

C

4G mobile phones

B

The World Wide Web

D

Sharks with lasers on their heads

Quiz Question Sheet





**During a long run, where the proton beams might circulate for up to 10 hours, how far will these protons have travelled?
(if they have not interacted of course)**



6

A

The distance from CERN to the sun and back

C

The distance from CERN to Neptune and back

B

The distance from CERN to the center of Geneva

D

The distance around the circumference of the Earth

Quiz Question Sheet





FINAL QUESTION:

Which elementary particle is most common in your body?



7

A

Up Quark

C

Electron

B

Down Quark

D

Bottom Quark

End of Quiz

What's your energy level?

We hope you had fun!