

Rules of the Game

7 questions, each with 4 answers to choose from (A, B, C, D).

Mark your answer on your answer sheet before the timer ends.

We will then reveal the correct answer.

If you have answered correctly you may tick off the next energy level.

Quiz Answersheet

1 A. B.
C. D.

2 A. B.
C. D.

3 A. B.
C. D.

4 A. B.
C. D.

5 A. B.
C. D.

6 A. B.
C. D.

7 A. B.
C. D.

Your score
Tick off one energy step for each correctly answered question, starting at the bottom

7 TeV
Full beam energy of the LHC

172.9 GeV
Mass of the top quark

91.2 GeV
Mass of the Z boson

938.3 MeV
Mass of the proton

105.7 MeV
Mass of the muon

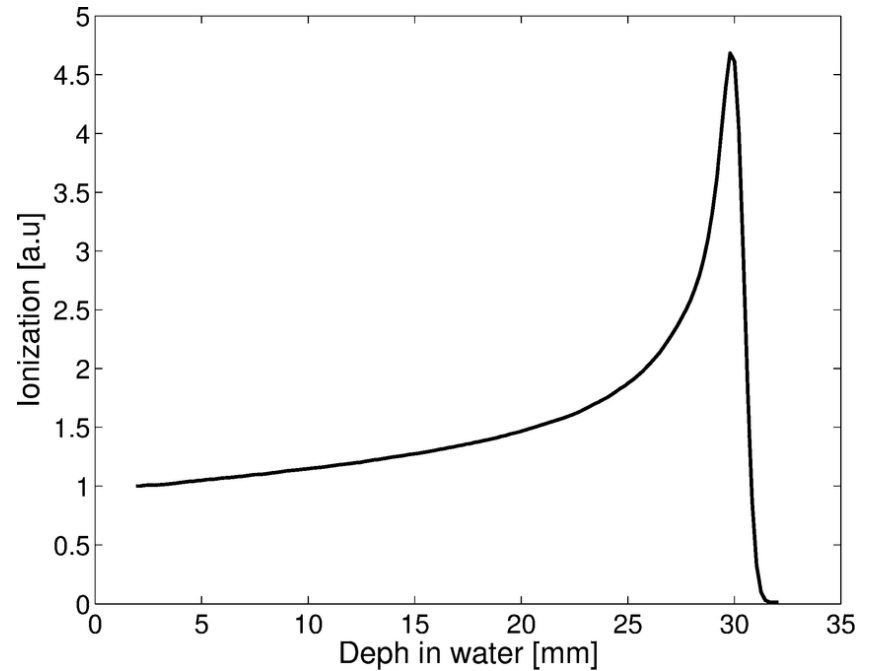
2.5 MeV
Mass of the up quark

0.511 MeV
Mass of the electron

Let's see which energy level you can reach!

Really?

Which physical principle
is
important for Hadron
Therapy?



1

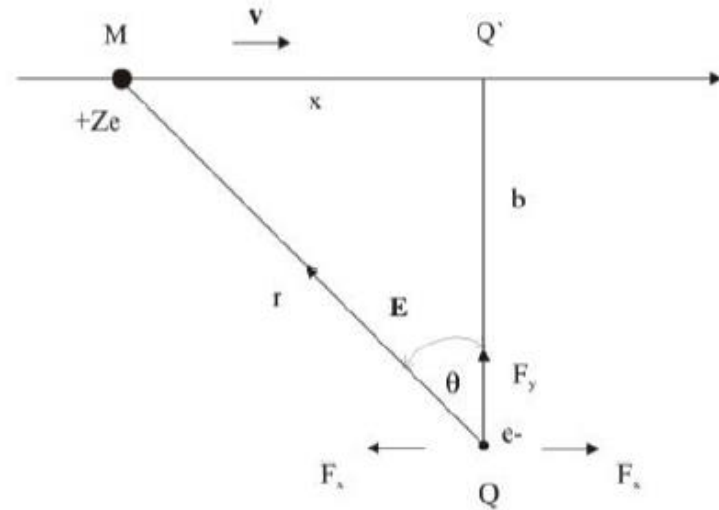
A. Brad's valey

B. Bragg valey

C. Bragg peak

D. Bill's peak

Which type of interaction is dominant between proton/ion beam with electrons from molecules of human body?



2

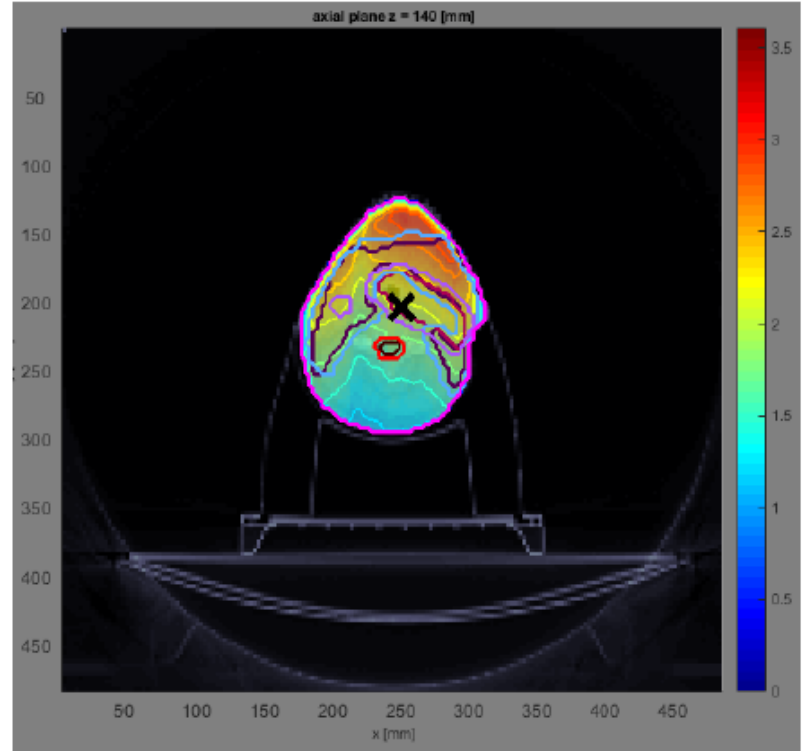
A. Electromagnetic force

B. Weak force

C. Strong force

D. Gravitational force

From the picture below, what particles are used to treat tumor?



3

A. Protons

B. Photons

C. Carbon ions

D. Pions

What is the unit for absorbed dose?



5

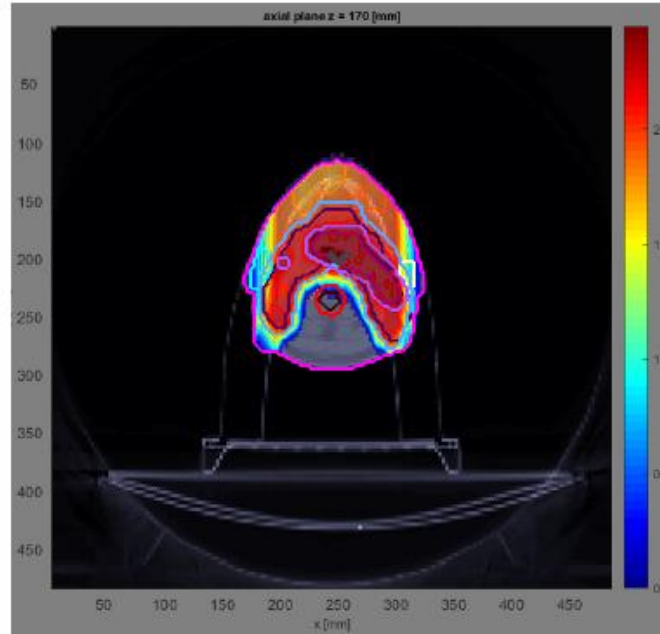
A. 1 Joule

B. 1 Newton

C. 1 Green

D. 1 Gray

Dose on the critical organs using proton/ion therapy instead of X-ray therapy is:



6

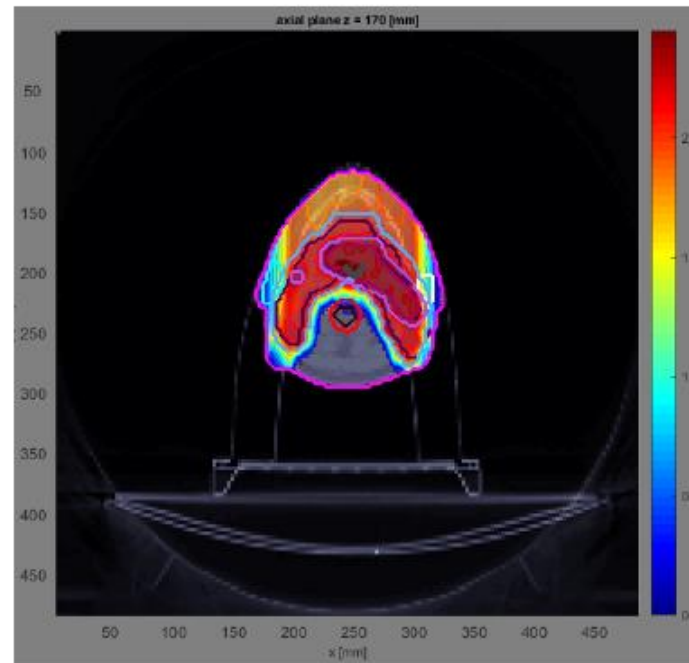
A. bigger

B. smaller

C. I don't know

D. equal

Dose on the skin using proton/ion therapy instead of X-ray therapy is:



7

A. smaller

B. bigger

C. equal

D. I don't know

Which energy level
did you reach?