



Hunt the Higgs

Aim To identify particle tracks that are the result of the decay of a Higgs boson.

Materials A montage of tracks produced by 70 events in the LHC

Method Given the characteristic tracks left by different particles and the expected decay of the Higgs boson (see over page) find the events in the montage that correspond to Higgs decays.

Conditions Give your answer as the coordinates in which the Higgs decays occur, such as A1, B2, C3, etc. You are allowed three attempts to submit the correct answer.

Time Limit 25 minutes

Ranking The ranking order will be determined by the time taken to submit the correct answer to a marshal, with a 5 minute penalty for the first incorrect or missing event coordinate, plus 10 mins for the second, plus 15 mins for the third, etc.

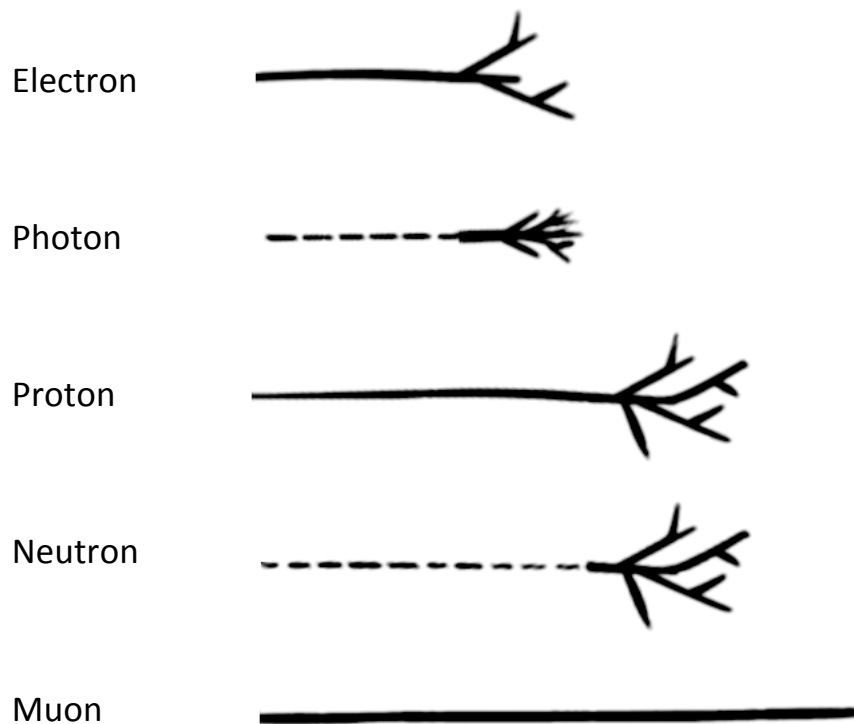
Team

Result

Do not write below this line

Rank

LHC tracks



The decay of a Higgs boson may result in...

4 electrons

or

4 muons

or

2 electrons + 2 muons
