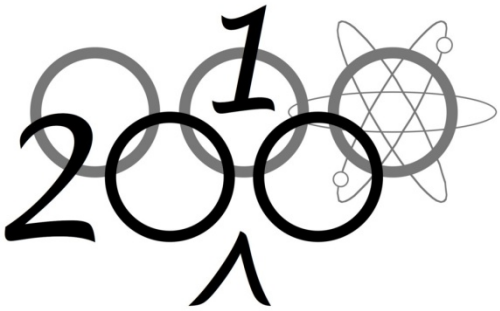
LIVERPOOL PHYSICS OLYMPICS



Location^3

Aim To determine the geocoordinates of a specified object (X), given the geocoordinates of three surrounding reference points.

Materials 1 metre rule 2 pieces of A4 card

Method Use the materials to make a protractor, sighting device, or theodolite and use triangulation to determine the location of the object. The reference points are as follows:

- A (sports centre) 53°24'14.75" N 2°57'57.54" W
- B (tree) 53°24'14.41" N 2°57'53.50" W
- C (railings) 53°24'17.42" N 2°57'53.52" W

Conditions

- All team members must remain on the grass at all times.
- No GPS receivers may be used.
- The result must be given in the sexagesimal system (degrees, minutes and seconds).

Time Limit 25 minutes.

Ranking The ranking order will be determined by the difference between your coordinates and the actual coordinates.

Team ***Result***

Do not write below this line

Rank