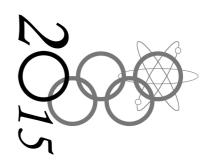
## LIVERPOOL PHYSICS OLYMPICS





## Location<sup>3</sup>

Aim	To deterr	nine th	ie lati	itude and	l lor	gitud	e of a	specified	object,
						_	_		

given the latitude and longitude of a reference point.

Materials Some A4 paper Calculator

**Method** Any. Note that the avenue of trees is aligned 6° East of North.

Also note that the radius of the Earth is  $6.4 \times 10^6$  m.

• No mobile phones or 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 distance between the

coordinates given and the actual coordinates.

The reference point is located at:  $53^{\circ} 24' 14.63''$  (North)  $-2^{\circ} 57' 50.26''$  (West)

		o	1	11
Team	Result			
Do not write below this line				

Rank