

## Outreach Hackathon

Target Audience :

General public pitched at the knowledge level of a GCSE student

Location :

Open days, science festivals

Number of people :

hundreds to thousands

The idea:

There would be two halves of the space , one half would be introducing and explaining the standard model, as well as ATLAS.

The other half will be an activity made up of post it notes – the aim would be to have visitors participate in a ‘hunt for the higgs boson’ using (probably simplified) event displays. They would be guided through the design of the detector in order to understand the displays, then the section with the activity would have a large poster of higgs signatures, and a big blank set of axes with invariant mass labelled along x. Visitors would find the higgs events in a stack, calculate the invariant mass based on info given on the event display, then place a post it note in the right spot on the axes. Over time, people walking past would get to build up the distribution and ‘discover’ the higgs.

Costing:

Festival fees: £1500

Post its £7.99

Posters £36

Print event displays: free on Liverpool uni printing

3 people per day, 2 days prep (one person)

Travel costs about £300