Contributing audio demos to the workshop

This is a workshop on the use of auralisation so it would be negligent to not provide opportunities to actually listen to delegate's work! With this in mind we would like to invite you to contribute audio demos and are offering the three reproduction options detailed below. Please do not feel that providing a demo is mandatory however, and in particular if you do contribute one (or more) please consider how long they will take to run. Time available will be limited as we are expecting a dense programme of talks and demos can only be run during coffee breaks and for a short period after the talks conclude on day 1; for the SoundLab in particular there is likely to be great demand and only a few people can listen at once. With that in mind, we advise that any demos you wish to run be described in your talk, so that facility time can be used to the fullest.

Whichever option you intend to utilise, please keep us informed so we can ensure it is catered for.

Audio playback during presentations

The room where the talks will take place has a basic audio playback system installed, so if your demo does not include an important spatial component then including it in your talk is probably the best approach, since it allows all delegates to hear the demo at the point when you are describing it.

Smaller portable demos

We will also provide a space for smaller demos (e.g. over headphones) to be contributed. If you wish to contribute to this it is probably easiest to bring a self-contained demo (i.e. on a laptop you bring), as this will ensure it works and add capacity for how many delegates can experience demos at once. We do however have a number of such systems, so if bringing your own hardware is problematic please get in touch and we may be able to provide something.

Larger demos using the SoundLab

Workshop hosts Arup have kindly agreed to allow us to use their SoundLab facility for spatial audio demos (see photo below). This is primarily configured as a 3D Ambisonics system, though other rendering approaches are possible by directly addressing the loudspeaker feeds. The playback configuration comprises 16 full-range loudspeakers, all equidistant from the listening position, plus 2 subwoofers. The full-range loudspeakers are arranged with eight in a planar octagon at ear height, plus eight more in a cube. The loudspeaker channel numberings are given in the table below.

The most straightforward approach will be if delegates can provide sets of (ideally 48kHz) .wav file 'stems' of the material which they wish to replay. These will then be loaded into pre-prepared Reaper and/or MaxMSP templates. In addition to directly addressing the loudspeaker feeds, a Blue Ripple Ambisonic decode has also been optimised for the system, so it is possible to render audio using this. This can accept either their 16-channel TOA format or, as a subset of this, four .wav files as standard B-format (WXYZ); for more details see http://www.blueripplesound.com/b-format. Alternatively if your demo requires a more sophisticated interface please contact us with your requirements and we'll look into whether it might be possible.

The SoundLab at Arup's Manchester office

Channel List Table

Channel	Section	Loudspeaker
1	Top ring	Top front
2		Top right
3		Top back
4		Top left
5	Middle ring	Front
6		Front right
7		Right
8		Back right
9		Back
10		Back left
11		Left
12		Front left
13	Bottom ring	Bottom front
14		Bottom right
15		Bottom back
16		Bottom left
17	Subwoofers (optional)	Sub 1
18		Sub 2