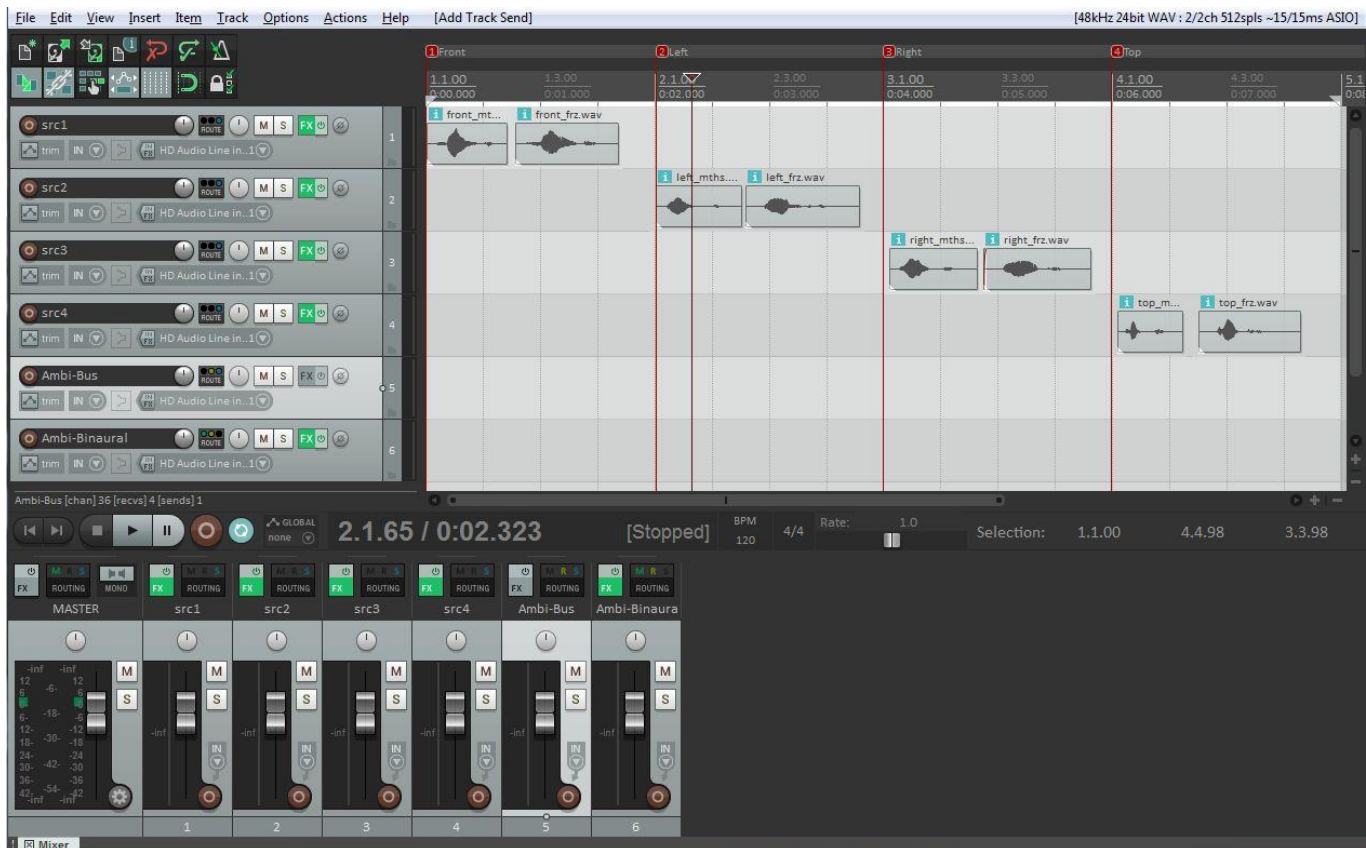


Reaper Templates and Demo Project for producing/checking 5th order Ambisonic productions for submission to Europe's First Student 3D Audio Production Competition at ICSA 2017, IEM/VDT

The Reaper session *ReaperTemplate_S3DAPC_ICSA2017.RPP* contains 4 audio tracks (src1 to src4), an Ambisonic bus (Ambi-Bus), and Ambisonic binaural rendering for headphones (Ambi-Binaural).



To run this template, you are required to download and install Reaper

<http://www.reaper.fm/download.php>, the ambiX VST plugin suite from

<http://www.matthiaskronlachner.com/?p=2015>

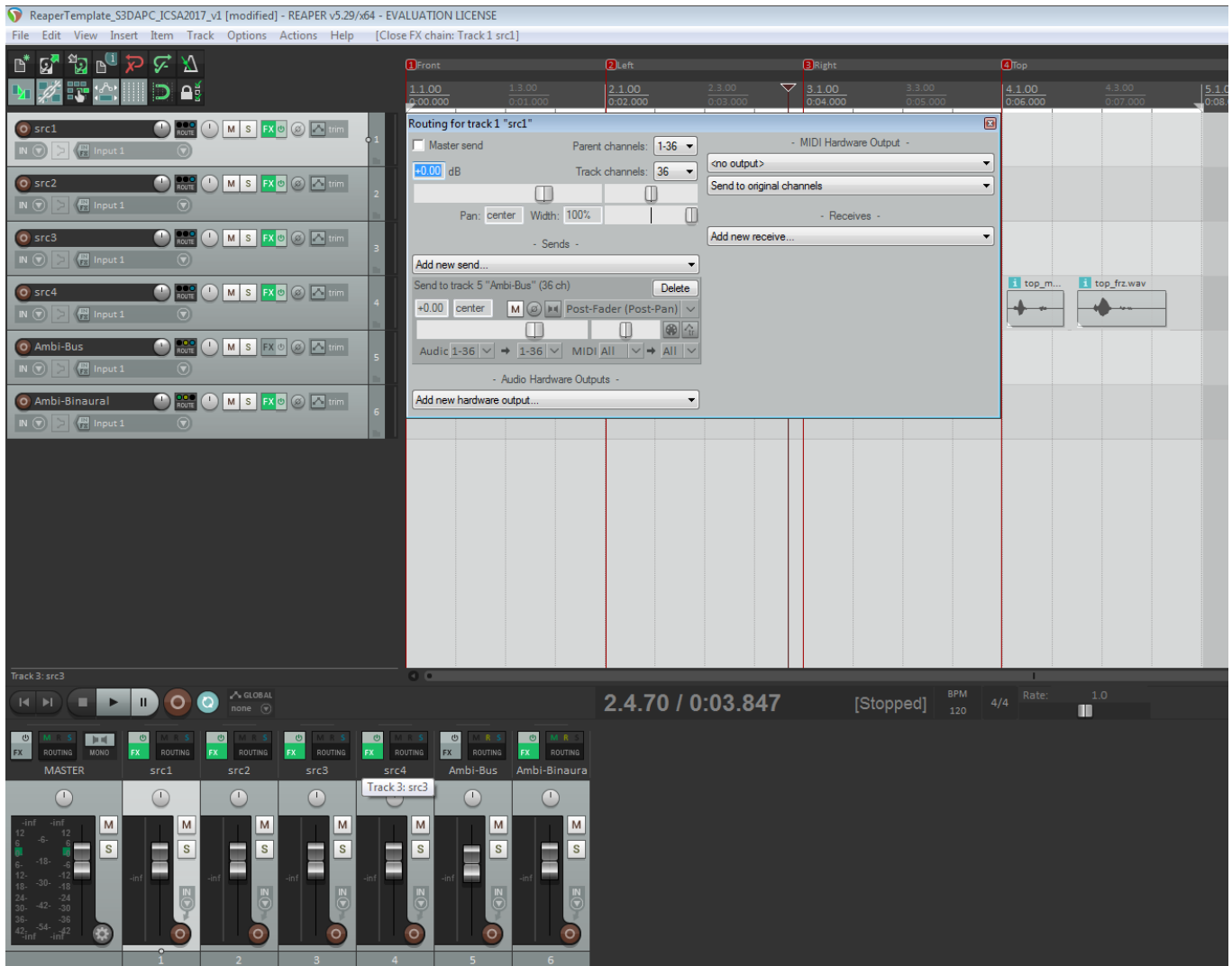
(maybe also the mcfx VST plugin suite), and the binaural impulse responses that permit rendering with the virtual Ligeti Hall, the target venue of the event. More information about the competition can be found at

<https://iaem.at/ambisonics/icsa2017-music>

and official ICSA 2017 is here:

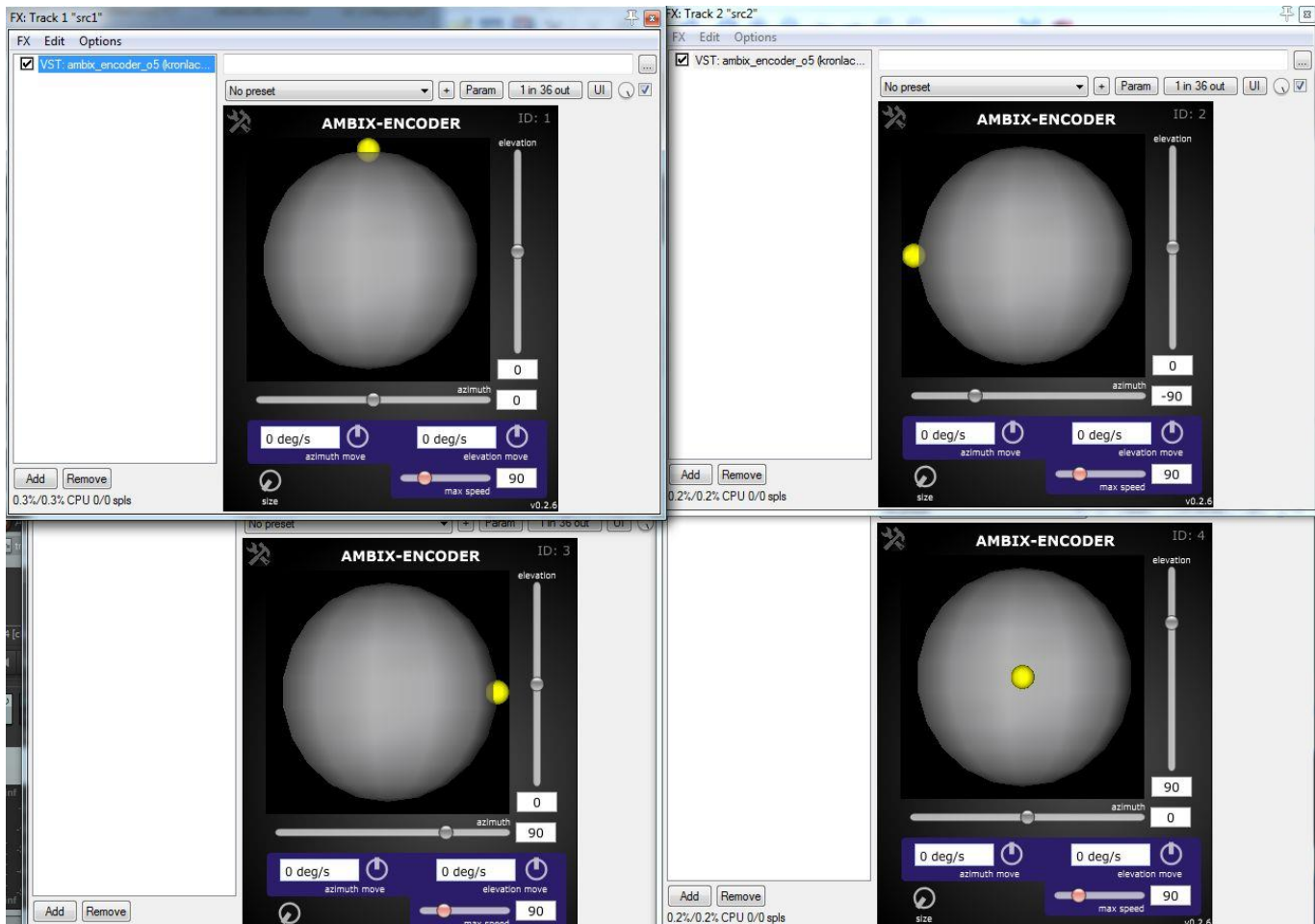
<http://www.tonmeister.de/index.php?p=veranstaltungen/icsa2017announcement>

Each one of the source tracks is configured to host 36 channels that are all routed to the 36-channel track “Ambi-Bus”. 36 channels permit Ambisonic productions of 5th order.



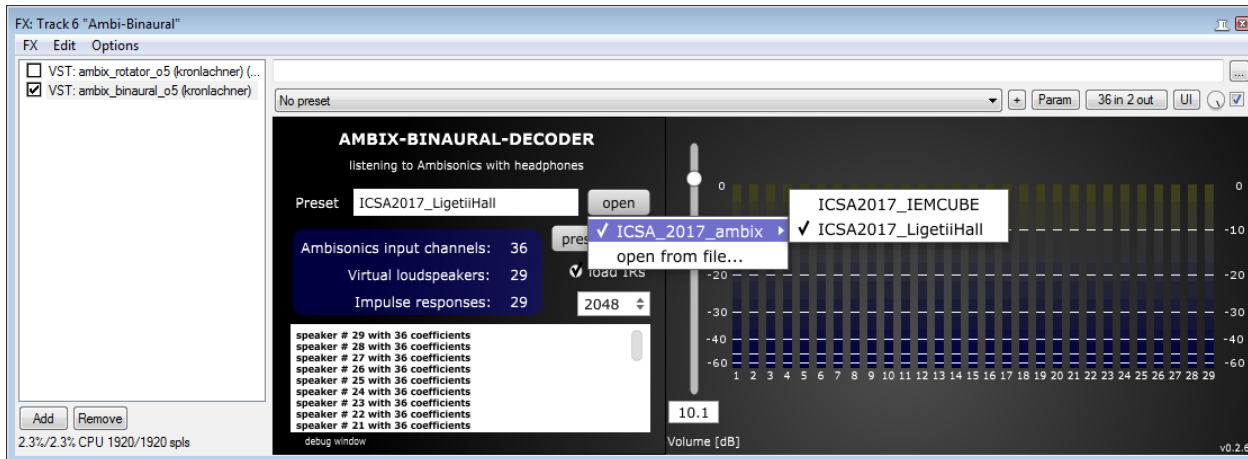
In each source routing track, there sits an Ambisonic encoder that converts its single-channel items into 5th order Ambisonic (36-channels) for the desired panning direction. The screenshots of the encoder plugins of all four tracks are shown below.

All of the directions specified in the ambix-encoder can be controlled remotely or in real-time using the track automation or OSC and MIDI messages, respectively.



All the source tracks are mixed on the Ambisonic bus “Ambi-Bus”, which is important later on for exporting an Ambisonic 36-channel audio file for your submission.

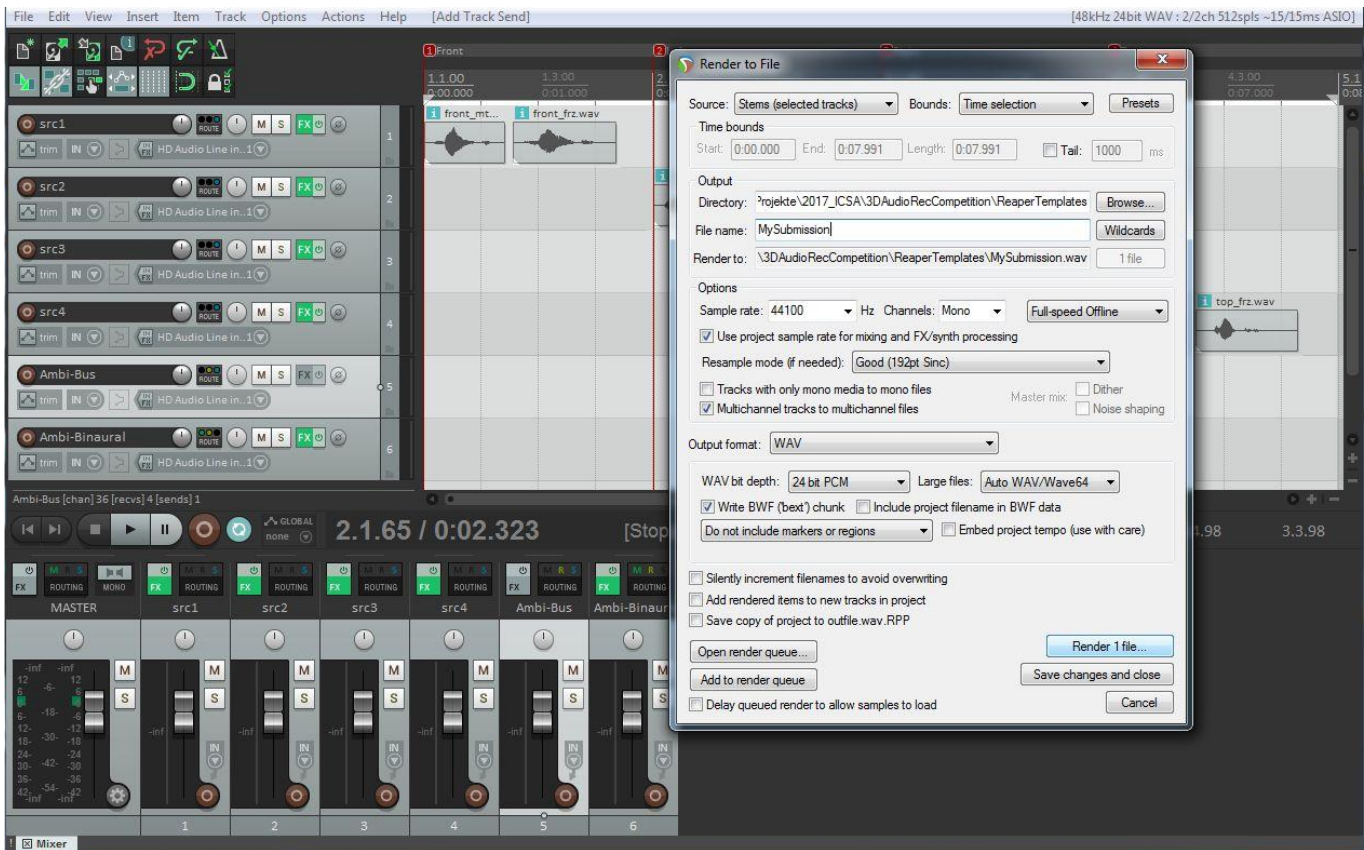
The Ambi-Bus signals are routed to Ambi-Binaural, where there sits the binaural renderer that gives you an impression of how your audio material will sound in the target venue, the György Ligeti Hall.



If you placed the preset “ICSA 2017_ambix” folder correctly in your file systems (On my computer this is C:\Users\p1936\AppData\Roaming\ambix\binaural_presets, pls. check suitable paths at <http://matthiaskronlachner.com>), then you are able to select the binaural rendering of the Ligeti hall for listening to your production on headphones. Optionally, it is also possible to use the IEM CUBE template.

If you have a head tracker and appropriate MIDI or OSC control, you can connect it with the plugin “ambix_rotator_o5” that moves the 3D audio headphone rendering counter to your head rotations, so that static sounds surrounding you are also static as if they’d happen outside of your headphones.

For rendering the maximum 4min piece of your submission to a 36-channel Ambisonic file you can select “Ambi-Bus” and choose File->Render, stems (selected tracks), time selection, multichannel tracks to multichannel files, and specify place and name.



Good luck with your work!