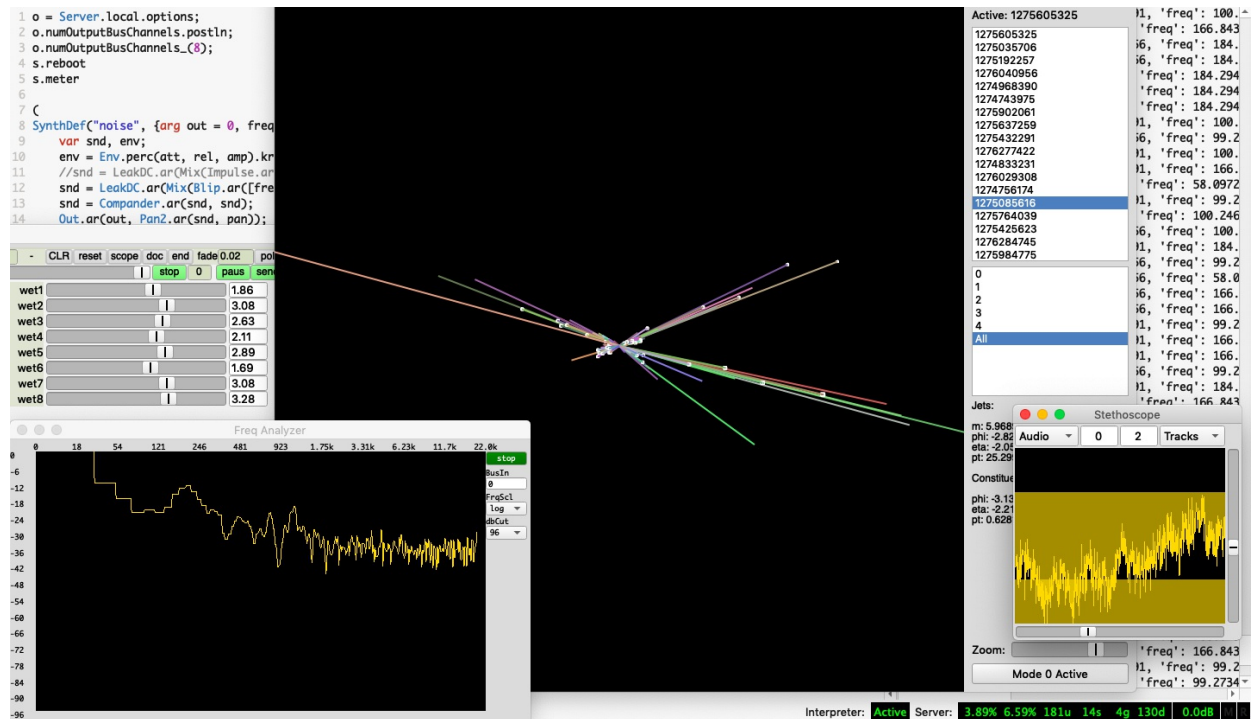# Live Coding Boot Camp: make sound using data from CERN

Description

This workshop will offer a hands on experience using SuperCollider for real time sound synthesis and just in time improvisation, making it ideal for sound artists, laptop performers, and instrumentalists who want to expand their performance practices and make their computer go BEEP!

Programming sound applications with SuperCollider can be very rewarding using its ready made sound generators to build novel instruments and interactive media for laptop improvisation. However, once the software is finished one can only interact with it on a higher level. On the other hand, live coding as a performance strategy, allows to improvise the structure of the instruments and alter their source code on the fly enabling a wider range of interaction affordances. The workshop will elaborate on the live coding project entitled Dark Matter involving sonification of data from the Large Hadron Collider, at CERN, in Switzerland.

Requirements

For the workshop we will use the SuperCollider (open source) programming language, a sound synthesis environment that is used for the development of music software and interactive appli- cations. Amongst other, it provides a state of the art sound synthesis server and an Integrated Development Environment (IDE) making it a powerful tool for real time audio applications used by musical performers, researchers, and sound artists.

Requirements

- No previous experience in programming but some familiarity with terms such as, timbre and signal processing will be helpful.
- Bring a laptop with the latest(stable) version of SuperCollider installed(found at this link: [http://supercollider.github.io/]).

Encore

The workshop will culminate in a performance by the participants involving live coding material developed during the workshop.