MUS 6: Electronic Music

Section Lecture 4

Wednesday, October 28, 2020

Lecture Outline

1. Announcements
2. Homework 2 *(Part 1: Audio Filters and Automation)*

Announcements

- Homework Assignment #2 is DUE by Friday, Nov 6 at 11:59 pm

Homework 2

(Part 1: Audio Filters and Automation)

Homework 2: Lecture schedule

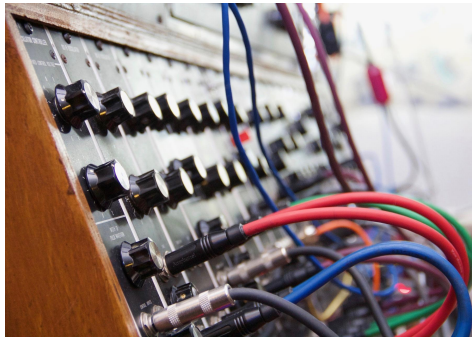
- **Today:**
  - Audio filter automation
  - Dry/wet and device on/off automation
- **Future lectures:**
  - Sampled audio
  - Musical scales
  - Reverb
  - Delay
  - Return tracks

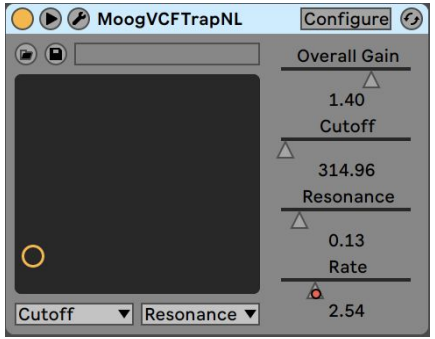
Homework 2: Listening examples

- We'll now listen to a couple examples of time-varying audio filters found in popular music. We can implement time-varying audio filters using automation. (Note: these examples are described in more detail on the class OneNote page).
    - The Chemical Brothers - Playground for A Wedgeless Firm
    - Daft Punk - Musique
- Both examples use audio filters. In particular, the Chemical Brothers song seems to use an audio filter similar to the Moog Voltage-Controlled Filter (VCF). The Moog VCF is also often referred to as the Moog ladder filter because its circuit architecture includes a ladder of low-pass filters. This ladder of low-pass filters gives the filter its resonant quality.

Homework 2: Moog VCF

- The Moog VCF is a resonant low-pass filter commonly used in electronic music.
- For those who are interested, you can follow this link to some simulation code I wrote that emulates the Moog VCF. You can compile the code to get a VST plugin that you can use in Ableton.
- To read more about the emulation, go here (see top of page).





Homework 2: Class demonstrations

- Some of you may already be familiar with audio filters and dry/wet automation. If you are and have composed music using these techniques, would you like to take a couple minutes to share your work with the class?

Homework 2: Ableton Live implementation

- We'll now open up Ableton Live and review how to program audio filters and automation. We'll use basic music theory to write a composition.
- For more information about these homework topics, go to the following pages on the class OneNote:
  - **Audio Filters:** Ableton -> Audio Effects
  - **Automation:** Ableton -> Recording and Editing -> Automation

Questions