

# **MUS 6: Electronic Music**

Section Lecture 6

*Wednesday, November 18, 2020*

# Lecture Outline

1. Announcements
2. Homework 3 (*Part 1: Arpeggiators and Synthesizers*)

# Announcements

- Homework Assignment #3 is DUE by Wednesday, [Nov 25](#) at 11:59 pm

# General Information: Dry/wet vs. on/off

- At a dry/wet setting of 100%, we only get the filtered sounds. In other words, the original (dry) sound is completely eliminated.
- We should think of dry/wet and on/off automation as distinct kinds of automation.

# **Homework 3**

## ***(Part 1: Arpeggiators and Synthesizers)***

# Homework 3: Lecture schedule

- **Today:**

- Arpeggiators
- Synthesizers (envelopes and LFOs)

- **Next week:**

- Compression
- Drum Racks
- Side-chain compression

# Homework 3: Class demonstrations

- If you've made music using any of the techniques outlined for Homework 3, would you like to take a couple minutes to share your work with the class?

# Homework 3: Arpeggiators

- In Ableton Live, go to MIDI Effects -> Arpeggiator
- You'll need to add an instrument in order to hear anything. We'll use the Analog instrument in today's discussion.
- When you hold down several keys at once, the Arpeggiator will play the keys in some pattern. To adjust the pattern, use the "Style" drop down menu.



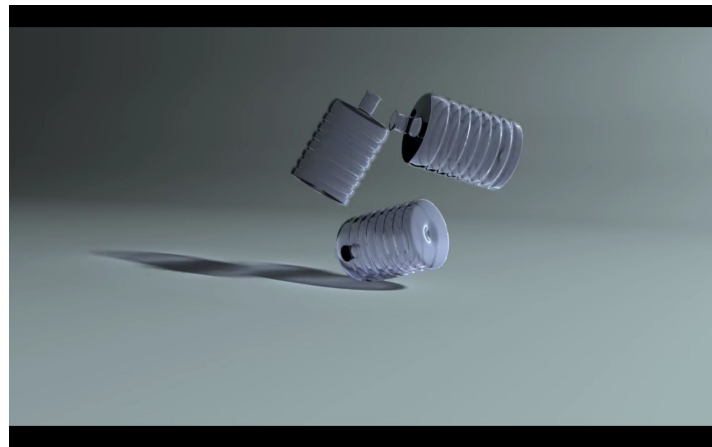
# Homework 3: Synthesizers

- In Ableton Live, go to Instruments -> Analog
- Analog is a digital synthesizer that emulates the classic analog synthesizers of the 1960s and 70s.
- Just like those vintage synthesizers, Analog has oscillators, amplitude and filter envelopes, and low-frequency oscillators (LFOs). **To earn full credit, you'll need to implement each of these features** (if you prefer, you may use a pitch envelope instead of a filter envelope).

# Homework 3: Synthesizers (listening examples)

The video below shows examples of computer animations that use physics-based sound synthesis instead of recorded audio. This is a cutting-edge research area.

[Harmonic Shells: A Practical Nonlinear Sound Model for Near-Rigid Thin Shells](#)



# Homework 3: Ableton Live implementation

- We'll now use the Arpeggiator and Analog plugins to recreate the theme song from *Stranger Things*. For an example of what this should sound like, see the audio clip provided on the section website.
  - [Stranger Things theme song \(original\)](#)
- Here's a complete list of the items we'll use in Ableton:
  - Arpeggiator
  - Analog
  - 808 Core Kit
  - Analog Pad Chord
  - 00DB\_Kick\_Astrix\_style\_2.aif
  - Reverb

# Questions