Sunspots

Jeff Snyder

Drew Wallace

ABSTRACT

Sunspots is a web art piece that allows the audience to explore a virtual 3D world. It is an interactive component to a physical audio release on dual-LP vinyl (also called Sunspots), allowing the material to go beyond fixed-media representation. Three environments can be navigated, each with their own audio and visual textures. The visuals make use of Three.js and custom shaders to allow for strange cloth-based physical simulations live in the browser. WebAudio is used for creation and spatialization of the sound in the 3D environment.
The audio for each environment is generated by overlapping multiple channels of "instruments" that are created by randomly loading different short segments of closely-related analog synthesizer material. These "instruments" are placed in different locations in the virtual world and cause audio-reactive visual behaviors through amplitude detection. Since the project is intended to accompany and compliment the physical audio recording, sample playback is used as opposed to direct WebAudio synthesis. The idea is to create generative versions of the pieces on the album that will vary endlessly and create a unique user experience.

https://spiricom.github.io/sunspots/