Kaleidoscope for Laptop Ensemble

Version 1.0

David Gordon
http://www.spatializedmusic.com/

Overview

Kaleidoscope is an electronic piece for laptop ensemble (2+ players) based on ideas of symmetry and fragmentation. The piece may last as long as the performers choose within the range of 3-8 minutes. Each performer chooses a role, or "module," that defines how they affect the creation, performance and visualization of the music and this module cannot be changed during a performance. (See below for a detailed description of each module.)

Every ensemble must contain at least one note gatherer and one visualizer.

The piece has an open-ended form, in which the way notes are generated, played, and visualized depends on a complex interaction of factors, including which modules are present, how these modules are used, random chance, and decisions made during the performance such as switching modules or changing musical parameters such as tempo, scale mode or key.

List of Modules

Name	Required?	Notes
VISUALIZER (Server Default)	YES	Must be the server
SONIFIER	YES	
CONTROLLER	NO	

Module Descriptions

SONIFIER
Use the grid of white spheres, or "sonification array", to collide with the colored lines. When you collide, you generate a note that gets broadcast to the other performers.

VISUALIZER
This module is used to output and modify these live visuals, which consist of colored lines generated using a modified random walk algorithm. When a note is played by any of the performers, it is reflected by an increase in the noisiness of the movement.

CONTROLLER
This module allows the performer to change certain musical parameters for all other performers. The available parameters to change are: tempo, scale mode, and tonic key.

List of Processes

OSTINATO SONIFIER ADDITIVE SUBTRACTIVE

Process Descriptions

OSTINATO
An ostinato in classical music is a persistently repeated motive or phrase. This module simply repeats the last motive it received in tempo, until another is received.

ARPEGGIO
This module creates an arpeggiated version of each motive it receives.

ADDITIVE *(Not yet implemented)*
This module creates an additive version of the motive: starting from only the first note, it repeats, each time adding one note.

SUBTRACTIVE *(Not yet implemented)*
This module creates a subtractive version of the motive: starting from the whole motive, it repeats, each time subtracting one note.