

## Program Notes

*Kaleidoscope is an electronic piece for laptop ensemble inspired by natural cycles, symmetry and John Whitney's theory of digital harmony. The work consists of two contrasting sections that investigate different musical and visual patterns. The software for the piece consists of separate modules assigned to each performer that determine their specific role in the ensemble. Notes are generated offscreen by a performer controlling an array of spherical agents that "pluck" notes from 3D symmetrical structures. A second performer interacts with a module that visualizes notes as they are played, transforming them into particles moving in symmetrical patterns seen by the audience. A third performer controls musical parameters such as key, pitch range and scale mode, as well as various timings. This interactive design creates a flexible structure, in which specific musical events during each performance are never exactly the same, in spite of the fixed order of sections.*