Archimedes | A Planetarium Opera | Math III
Music by James Dashow.

Archimedes a three act opera about the life, works, and death of Archimedes. The music for this opera is all computer generated, but with a real choir and actors and computer generated video as scenography. The video is to be projected in a planetarium for a special tridimensional image rendition. Each chapter of the opera has a video track in a very special time/space sync creating a complex multi-sensorial experience.

00:00 | Intro to Archimedes Intuitions - Archimedes starts warming up
(Staggered high pizzicato sounds.)

01:28 | Graphics and proportions
(Rapidly moving pizzicato with long sustain sounds that glissando downward at the end with reverb.)

01:40 | Feynmann diagrams
(The rapidly moving pizzicato & long sustain sounds are developed creating tension.)

02:30 | Bubble chamber
(The tension created at 01:40 is developed to a point where the different sounds crash into each other and mix creating a bubble that eventually explodes and dissipates the sound into smaller rapidly moving high pitched frequencies.)

03:24 | Chaos, rhythm and recursive structures
(Reverse and reverb are added, creating a circular themed rhythm where the rapidly moving pizzicato sounds dance on the threshold of watery artifacts)

05:33 | Lorentz strange attractors
(The circular theme is further developed through the use of panning, crescendos, and silence.)

06:42 | Getting smaller
(The sounds that were in the forefront move to the background and gradually fad out to make room for a more dry pizzicato section to appear at 07:13.)

07:13 | Strings theory
(Dry rapidly moving pizzicato section with wet moments, silence is added to create tension or suspense)

08:32 | Penrose tessellations
(Dry rapidly moving pizzicato with wet sustained sounds in the background are used to simulate the discovery of the black whole)

09:28 | Brane, bigbang and multiverse theories
(Short sustain wet sounds move from the background to the forefront, while dry pizzicato sounds move to the background. During this process we have a build, explosion, and dispersal of sound that simulates the big bang and the ramifications that followed it.)

12:22 | Finale
(The layering of long sustain sounds, & wet rapidly moving pizzicato in the background, are all used to show the ramifications of the bigbang its dispersal of life.)

15:00 | Death of Archimedes
(A sequence begins at 14:00 minutes where everything that was built comes crashing down and all life is lost at 15:00. long sustain wet sounds become sharp and dry, everything is starting to die. What was given life is not destroyed. To simulate this all sound gently fad away.