

PENINSULA ARTS CONTEMPORARY MUSIC FESTIVAL 2016

Frontiers: expanding musical imagination

Sonification of Dark Matter

Friday 26 February 2016 | 1930 | IVT/The Dome Plymouth University
Saturday 27 February 2016 | 1400 | IVT/The Dome, Plymouth University
Sunday 28 February 2016 | 16.00 | IVT/The Dome, Plymouth University

Sonification of Dark Matter is an installation that combines visualisation and sonification of a dark matter simulations produced by the *Kavli Institute for Particle Astrophysics and Cosmology* at Stanford University. The audience will experience and better understand this complex data through sound and music.

Sonification is the use of audio to transmit data; we will attempt to understand our universe through sound and music. Multiple experimental versions of data sonification, different mappings and sounds will highlight various aspects of the data which are not necessarily obvious through the visualisation. The aim is to use cognitive capacities related to hearing to expand our perception of information. The listener will be invited to explore the differences in perception when confronted to novel representation methods of data.

Sonification of Dark Matter is an attempt to approach the scientific practice of sonification as a composer. I reflected on parameters of Western Classical Music, such as pitch, rhythm and harmony, and wider parameters of music like space, time and timbre as means of information transmission. Though I have a favourite version, the listeners will be invited to make their own mind up!

Biography

Núria Bonet (b.1991) is a composer currently studying for a PhD in Computer Music at Plymouth University. She has previously gained an undergraduate and a masters degree in Music from the University of Manchester and a masters degree in Acoustics and Music Technology from the University of Edinburgh. Her research relates to sonification as a compositional tool particularly in electroacoustic music; in her spare time she researches Catalan folk instruments.