

The Bourgillator is a complex system of interacting oscillators. It draws its inspiration from several research papers on topics such as the Kuramoto system and slow-fast systems of ordinary differential equations.

Here we hear the gradual self-organising process of the oscillators synchronising and repelling each other. In this particular realisation there are 21 oscillators, each with a phase variable, an amplitude variable and a slow envelope follower, making it a 63-dimensional autonomous system. Instability has been designed into the system; instead of rapidly reaching a steady state, it will meander around in its phase space and sometimes suddenly tip over into a different pattern. In this mix, made particularly for Zeppelin 2017, the 21 oscillators are distributed to 16 channels.