

Abstract: DISSCO, a Digital Instrument for Sound Synthesis and Composition, Y4

DISSCO, a Digital Instrument for Sound Synthesis and Composition, unifies composition and sound design in a seamless approach. A DISSCO composition consists of many thousands of individual sounds (770,000 in one current example) organized around a hierarchy of large and small musical segments. Each sound may comprise an arbitrary number of partials (overtones in musical parlance) dependent on up to thirteen degrees of freedom. DISSCO is written in C++ and uses p-thread parallelization at the level of sounds.