## Rupert Huber Super Collider

## **A Sound Accelerator**



Teilchenbeschleuniger, Cern, Genf



if atoms/atom particles collide at a very high speed, the energy of their collision will create new matter.

## **The Super Collider Project**

The Music Super Collider is an accelerator which will bring music particles into head-on collision at high energies to allow musicians to penetrate still further into the structure of matter and recreate the conditions prevailing in the Sound Universe just 10—12 seconds after the 'Big Bang' ...

the sound particle accelerator is based on a technical set-up that enables different varieties of electronic music (dj, instrumental, live re-mix) to be performed modularly in various

constellations (simultaneous, sequential, overlapping ...); collision is defined as ensemble play/collaboration by musical artists whose music displays similarities in certain creative/stylistic respects or who take a related approach to music.

the participating artists offer countless collision possibilities to choose from. categories (live/mix/dj or dj/dj ...) and aspects (tempo, frequency ...) as well as zones (ambiance, grooves) are defined in order to describe the possibility of ensemble play/collision at a particular point in time. these coordinates, supplemented by the selection of musical particles (persons) who collaborate on a particular day, are characterized by a certain color which serves as the basis for the work of visual artists on that day.

according to the principles of physics, the world consists of electrons, u-quarks, d-quarks and empty space. once the sounds of the Music Super Collider have reverberated, the same will be able to be said about electronic music and musical particles (frequency, rhythm, space, categories, aspects, zones). each participant has the opportunity to declare himself to be a particular particle (category, aspect, zone; proton, neutron, electron ...) for a certain period of time, and to fulfill the desire to stage certain forms of collision. collisions can occur among and between all particles. In this way, there emerges a matrix of desired collisions which the participants and the audience, acting as an orientational aid, can facilitate the collision matrix serves to coordinate the possible collisions; it is a score which directs the transmission of sounds into the various rooms and spaces of the Stadtwerkstatt (dance floors, communication room ...).

the venue's interior spaces are assigned specific musical and audio-technical functions and prevailing conditions: observation station, collision space, cool-off/warm-up room.

the music particles' frequency, rhythm, space, instrument, volume are made to collide in the particle accelerator. the chief focus of each daily experimental undertaking is on a particular type of particle collision, such as frequency-frequency, etc. these specified investigations of musical states are conducted in light of a single primary color which varies according to the theme of the respective performance.

music is accelerated; at certain times, it collides with other music; the collision causes energy to be released. in a musical particle accelerator, particles are not directed at metal plates, but rather at similar particles or those of a different type/nature.

this corresponds to musical congruity and the principle of movement and countermovement. in music super collider the particles themselves determine their movement — their vocalization — oriented on prevailing architectural, technical, and spatial conditions. it is also conceivable that, on a particular day, the audience might witness two particles making the effort to avoid colliding with one another.

a sound collider is a particle accelerator in which sound waves produced by the instrumentarium of musicians and musical artists fly about, accelerate/are accelerated, and collide or simply fly past each other.

musicians, composers and audio artists — as atoms and atomic particles representing a variety of so-called musical styles and diverse acoustic worlds — have been invited to take part in this undertaking. these individuals are interested in and capable of collaborating on the process of comprehending alternative approaches to music and working with them; they understand how to deal with styles, components, and fragments of music, and to place them in another context, another structure or composition, or to play together with them. the

participation of video artists can take the form of commentary or collision; thus, a visual architecture can accommodate sound atoms, structure them, or clash with them.

first day black white start-up of the accelerator, observation of particle movement in space 1

second day color 1 acceleration, particle movement in spaces 1+4, collision

third day color 2 direct impact of particles open-air/space 2; observation, evaluation and further collision in space 1

fourth day color 3 direct impact of particles open-air/space 3; observation, evaluation and further collision in space 1

fifth day white black observation, evaluation and further collision in space 1 cool-off, shutdown of the accelerator

from the energy that the coming-together of artists produces, emerges music, material in time.

think of a musical collision as a direct encounter of two contemporaneous particles of equal standing that does not have to serve the process of attaining some overriding artistic or commercial goal.

furthermore, this is not a matter of bringing together different works of music, which is carried out by some individual in a superior position such as a composer or director blending a variety of styles; rather, this is the collision of particles of equal standing, which has nothing to do with the authorship an individual can claim to material he has produced himself. by means of the collision matrix, the artists themselves determine the form, duration, and type of collaboration that goes on in the context of the accelerator.

the features built into today's electronic instruments — with respect to their production of acoustic signals, their capacity to save these signals in memory, as well as their capability of modifying them — can satisfy virtually every demand that an individual endowed with a reasonable amount of electronic creativity can place upon them. the instrumentarium consists of a catalog of various ways of working with diverse musical-technical devices, which have been refined and specialized over the course of time. the user does not just fill a sampler with tones; he is called upon to build his own instrument. What emerges is a catalog of instruments and ways of working with them, whose combination can constitute the highly characteristic sound of a musician.

the Music Super Collider ought to be regarded as a self-creating instrument, and as a variety of possible instruments.

if an atom and its counterpart come to an agreement about certain parameters — for instance, collision speed, zone, category — and an encounter does take place in a shared musical and actual space, that is translatable as the formation from time to time of different orchestras from out of one another and from out of the make-up of the *Music Super Collider* itself. (agreement as to parameters can, of course, also encompass the suggested modes of behavior and implementation that a sound or sequence of sounds imparts to electronic music.)

the atoms represent worlds in and of themselves. each can be broken down into its component parts; together, they constitute a whole that exceeds the sum of those parts. as far as the music is concerned, the invited artists simultaneously represent parts of it. the music accelerator provides them with the opportunity to move about freely, to collide with other atoms, to impact them — or not — and thus to determine the form of the body of work that emerges.

from atomic particles that are atoms per se, an atom of the music world is formed.

Audio and Video Artists: richard dorfmeister, shantel, peter kruder, daniel haaksman, sam auinger, lukas ligeti, tosca, sofa surfers, kurt dahlke, scanner, johannes strobl, hanno leichtmann, paloma, jim o'rourke, rachel de boer, julia zdarsky, kurt mayer

Venues: stadtwerkstatt, ars electronica quarter

fa.huber in collaboration with g-stone, lowres, stadtwerkstatt