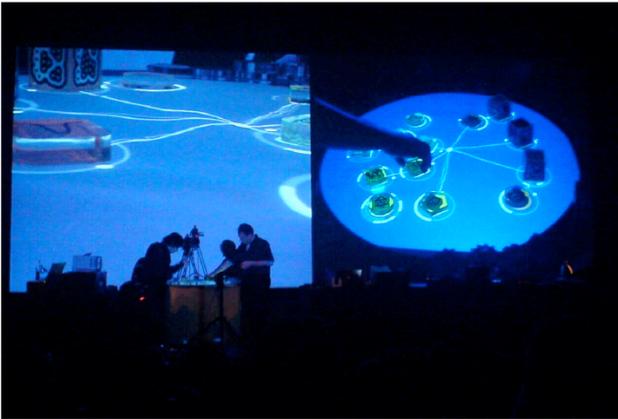


Stowarzyszenie Artystyczne  
"Muzyka Centrum"  
Akademia Muzyczna w Krakowie  
Bunkier Sztuki

## Festiwal Audio Art'08

# Sergi Jordà

(Barcelona)



A concert using two cameras and two projectors

# reactable

koncert

piątek, 28 listopada 2008, godz. 18.00  
Sala Koncertowa  
Akademii Muzycznej w Krakowie

projekt zrealizowano przy wsparciu finansowym:  
Ministerstwa Kultury i Dziedzictwa Narodowego  
Gminy Kraków  
Ramon Lull Institute, Barcelona

**Sergi Jordà** (Madrid, 1961), began his computer music activities in 1984, after graduating in physics and abandoning saxophone. Since then he has always tried to combine with the greatest flexibility and interrelation, research, theoretical thought and artistic creation.

During the eighties he works on speech synthesis and explores machine music listening and improvising computer systems, performing with the Spanish experimental group Clónicos, and also composing electronic music and soundtracks for films, videos and dance projects.

Since the beginning of the nineties, he works in wider multimedia projects, installations and performances, often collaborating with other visual and performing artists such as Konic Thr (IO-Zn and Kapsula-K), La Fura dels Baus (F@ust Music On Line and DQ), Cristina Casanova (web-DQ) and Marcel.li Antunez. With the former, he has created the pigskin robot JoAn, the Meat Man (1992), Epizoo (1994-95), an interactive performance which has been showed in more than twenty European and American countries, and Afasia (1998-99).

His main research lines are sound/image interrelation (the Video Choreographer software), computer music improvisation and collective music composition through the Internet (F@ust Music On Line).

He is codirector of the Master in Digital Arts and director of the postgraduate course [Multimedia Oriented Programming](#) of the Audiovisual Institute, coordinator of the Interactive Systems area inside the Music Technology Group of the same institute and associate professor at the Pompeu Fabra University of Barcelona. He has written many articles, books, given workshops and lectured though Europe, Asia and America. He currently performs with the free-improvisation electronic group FMOL Trio. He has received several awards, including the Ciutat de Barcelona in multimedia category in 1999.

The **reactable** is a collaborative electronic music instrument with a tabletop tangible multi-touch interface. Several simultaneous performers share complete control over the instrument by moving and rotating physical objects on a luminous round table surface. By moving and relating these objects, representing components of a classic modular synthesizer, users can create complex and dynamic sonic topologies, with generators, filters and modulators, in a kind of tangible modular synthesizer or graspable flow-controlled programming language.

The instrument was developed by a team of digital luthiers (Sergi Jordà, Martin Kaltenbrunner, Günter Geiger and Marcos Alonso), working in the Music Technology Group within the Audiovisual Institute at the Universitat Pompeu Fabra in Barcelona Spain.

Their main activities concentrate on the design of new musical interfaces, such as tangible music instruments and musical applications for mobile devices. The reactable team was recently awarded with various prizes such as the "Ars Electronica Golden Nica", the "Premi de la Ciutat de Barcelona 2007" and two "D&AD Yellow Pencils" and the Icelandic singer Björk has successfully used the reactable during her last "Volta" world tour.

The **reactable** intends to be:

- . collaborative: several performers (locally or remotely)
  - 0. intuitive: zero manual, zero instructions
  - 0. sonically challenging and interesting
  - 0. learnable and masterable (even for children)
- 0. suitable for novices (installations) and advanced electronic musicians (concerts)

The **reactable** hardware is based on a translucent, round multi-touch surface. A camera situated beneath the table, continuously analyzes the surface, tracking the player's finger tips and the nature, position and orientation of physical objects that are distributed on its surface. These objects represent the components of a classic modular synthesizer, the players interact by moving these objects, changing their distance, orientation and the relation to each other. These actions directly control the topological structure and parameters of the sound synthesizer. A projector, also from underneath the table, draws dynamic animations on its surface, providing a visual feedback of the state, the activity and the main characteristics of the sounds produced by the audio synthesizer.