

ESMÚC BARCELONA
IRCAM-Seminar

Monday May 5th PM

LE SPATIALISATEUR

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Abstract

The IRCAM Spatialisateur is a Max/MSP library for the spatialization of sound signals in real-time and a room simulator intended for musical creation, postproduction, and live performances. In this session, we will cover the main aspects of the library.

Summary of topics

Spat structure (source, room, pan)

Examples of configurations (stereo recording simulation, binaural/transaural techniques, 4 to 8 speakers setups, wavefield synthesis, etc.)

Spat control techniques (room perceptive control, trajectories, control by ambimonitor or joysticks)

Examples of use (concert, exhibitions)

Tuesday May 6th PM

**L'APPARENTE : TECHNOLOGIES FOR GESTURE FOLLOWING AND GESTURE RECOGNITION
APPLIED TO REAL-TIME MODAL SYNTHESIS**

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Abstract

In a three-hour session, I will speak about the project *L'Apparente*, a musical work-in-progress currently being produced at IRCAM during my *Cursus II* residence that will premiere next October as a part of the IRCAM musical season.

The hardware and software technologies involved in this project, and developed at IRCAM, will be described, demonstrated, and tested by participants.

Summary of topics

A short description of *L'Apparente*: starting points, ideas, and challenges (about 20 minutes).

Technologies and methods for gesture following and gesture recognition using IRCAM wireless sensors. The latest hardware and software developments in this domain will be described and showed (about 1 hour). Different approaches will be discussed.

Application of control signals for real-time physical modeling synthesis. Signals from gesture following/recognition and sound analysis are used to make virtual instruments created with the *Modalys* software program vibrate or to modulate them (about 1 hour).

Hands-on session on gesture following and recognition with the sensors applied to virtual instruments, electronic elaborations, and/or spatialization opened to participants (about 40 minutes).

Technical Requirements :

- 4 speakers, setup in a square.
- 4 jack 6.35 male/male or an ADAT cable to connect a RME FireFace 400 (that I bring) to the setup.
- Max/MSP 4.6.3 with Spat 3.4.1.1 should be installed (we can send the Library before if necessary...) on the computers of the classroom.
- We will bring the sensors for the second session.