

## **PCSLIB: a Pure Data Library for pitch-class analysis and composition**

*pcslib* is a library of external objects for the program *pd* (*Pure Data*, Miller Puckette et al) that allow the use of *Pitch-Class Sets* and *Combinatorial Matrices* on musical analysis and composition. *pcslib* was developed by Pablo Cetta and Pablo Di Liscia as a part of the Research Project *Aplicaciones Musicales de Conjuntos y matrices combinatorias de grados cromáticos* (*Musical applications of sets and combinatorial matrices of pitch-classes*), Universidad Nacional de Quilmes, 2009-2012.

The talk will address two specific subjects on the field of *pitch-class set* theory in order to show their theoretical foundations, computer applications and musical relevance: 1-Pitch-Class and Set-Class similarities. 2-Combinatorial Matrices design by means of chains of PCS.

More information about *pcslib* can be found at:

<http://puredata.info/Members/pdiliscia/pcslib/>

### **Oscar Pablo Di Liscia**

Musician and Academic born in 1955 at Santa Rosa (La Pampa, Argentina). Attained his Doctoral degree in Humanities and Arts at Universidad Nacional de Rosario. Was Director of the Program in Electronic Composition of Universidad Nacional de Quilmes (Argentina). At present is Professor at Universidad Nacional de Quilmes, (Buenos Aires, Argentina) and at Instituto Universitario Nacional del Arte (Buenos Aires, Argentina). His compositions has been awarded by national and international societies and performed at Cuba, USA, France, Spain, Chile, Holland, etc. He has published papers on aesthetics and techniques of new music and technologies, as well as developed software for Digital Signal Processing, Musical Analysis and Composition. His main areas of research are: Digital Signal Processing (specially Sound Spatialisation and Spectral Analysis of Digital Sound), Electronic Composition and Computer Music.

