

New
York
City

H₂Ochestra

HYDRAULOPHONE WORLD TOUR



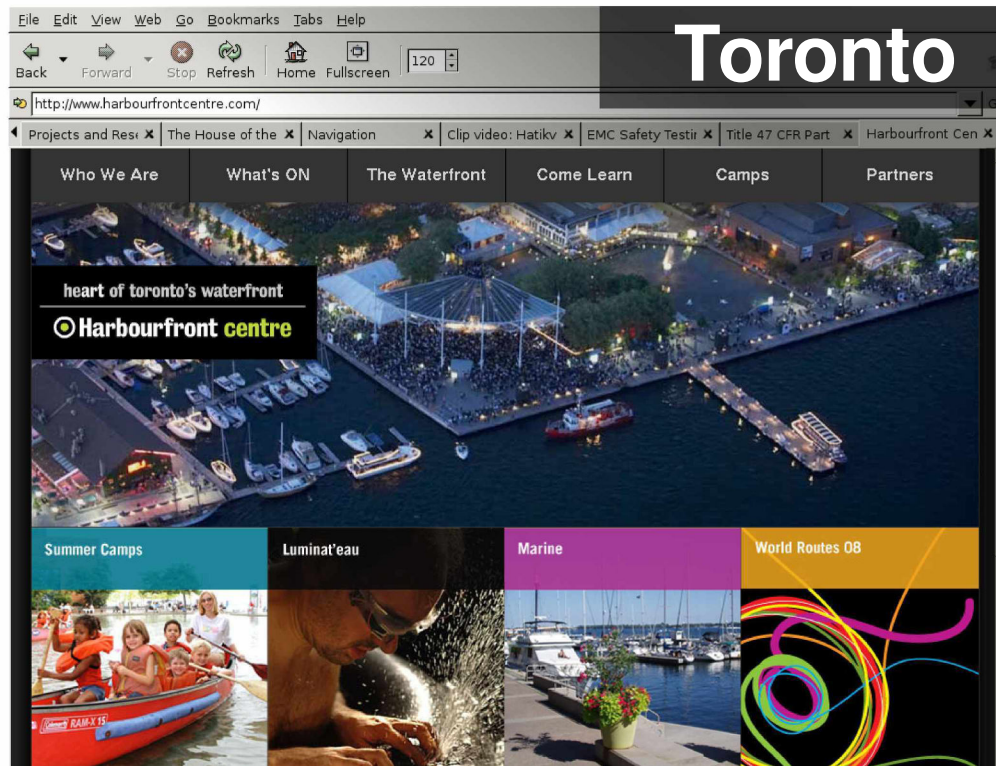
<http://h2orchestra.com>



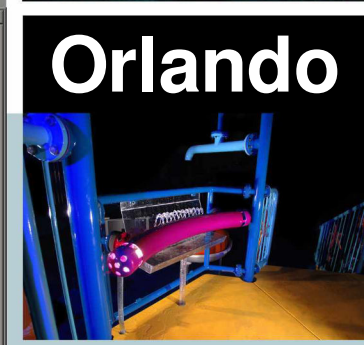
San Francisco



Las Vegas

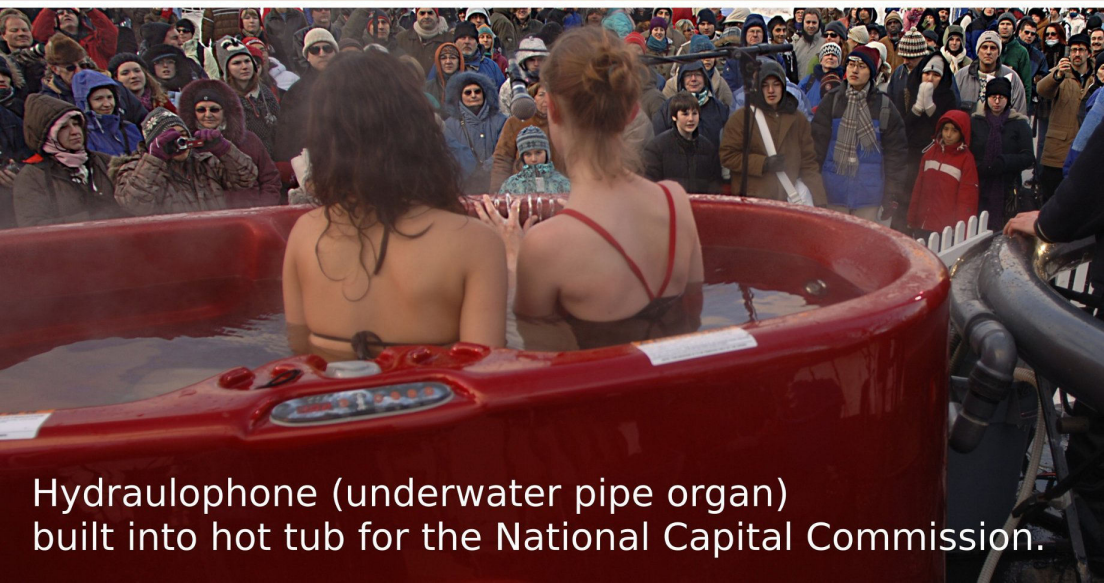


Toronto



Orlando



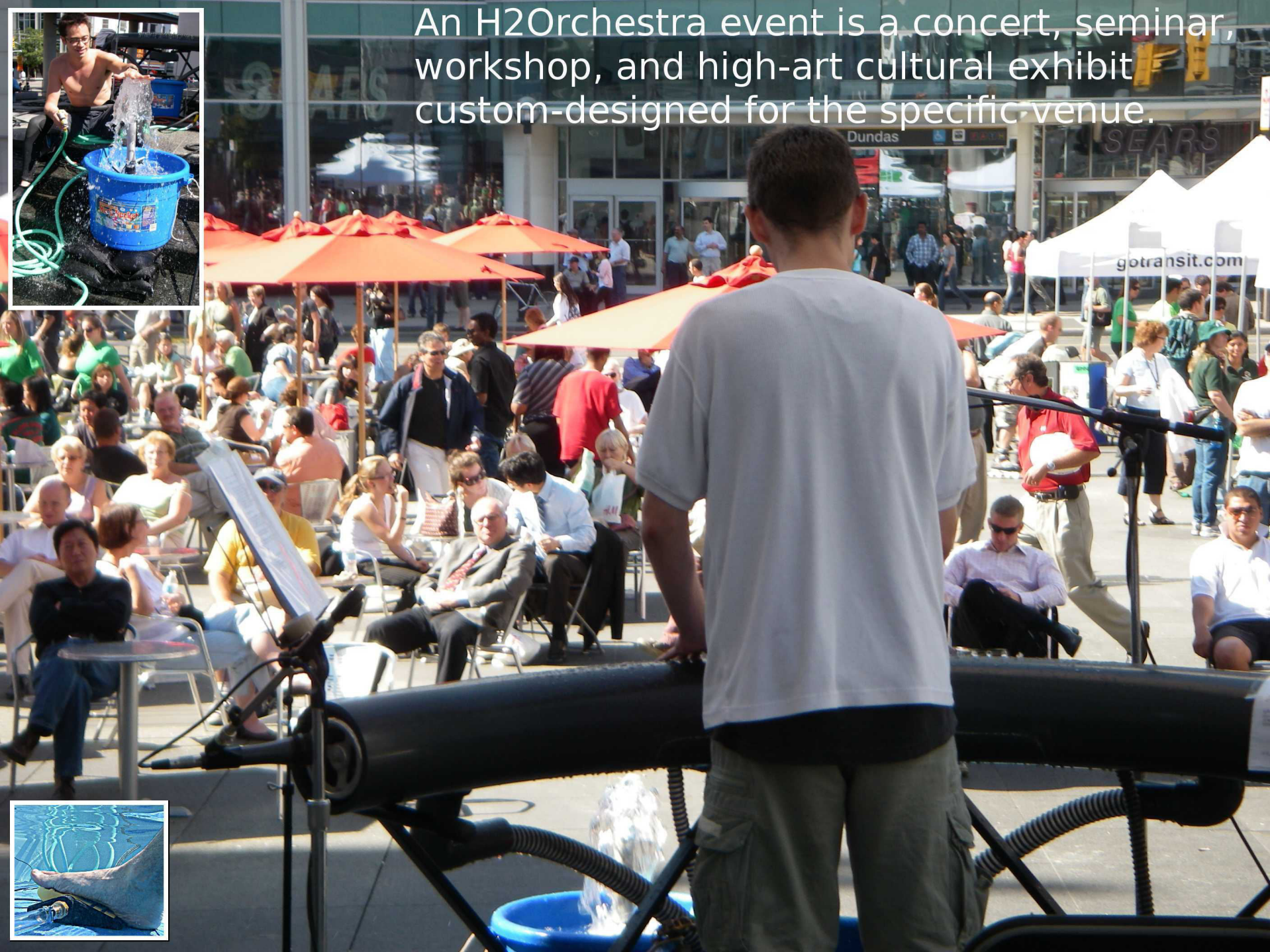


Hydraulophone (underwater pipe organ)
built into hot tub for the National Capital Commission.



Main act for Winterlude, North America's
largest winter festival, played to
audience of more than 10,000 people.

An H2Orchestra event is a concert, seminar, workshop, and high-art cultural exhibit custom-designed for the specific venue.



H2Orchestra was the main act for SPLASH Festival 2011. Lake Simcoe was turned into the world's largest musical instrument. Turning the lake itself into a giant musical instrument raised awareness of the importance of clean lakes and rivers.

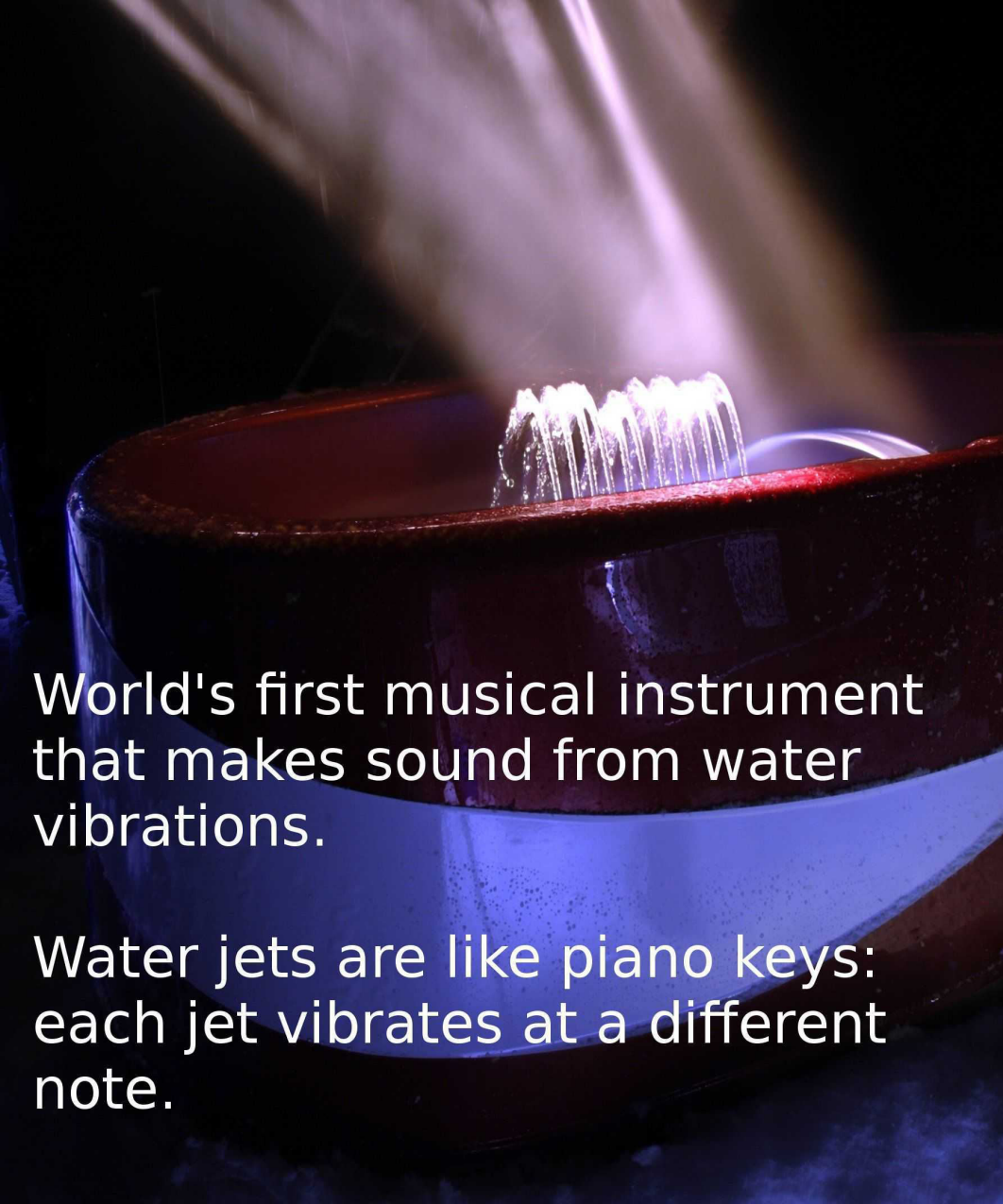


The hydraulophone is a musical instrument used around the world in concerts and dramatic performances to raise awareness of the importance of clean lakes, rivers, and water as a natural resource.



Each water jet is a key on this water keyboard. Sound from vibrating water makes intricate microtonal harmonizations





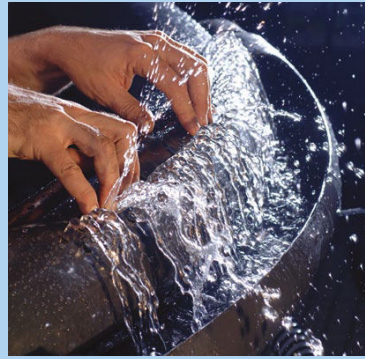
World's first musical instrument
that makes sound from water
vibrations.

Water jets are like piano keys:
each jet vibrates at a different
note.





Pagophone
Solid H₂O (Ice)



Hydraulophone
Liquid H₂O (Water)



Hydramatophone
Gas H₂O (Steam)



Plasmaphone
Plasma "H₂O" ("Lightning")

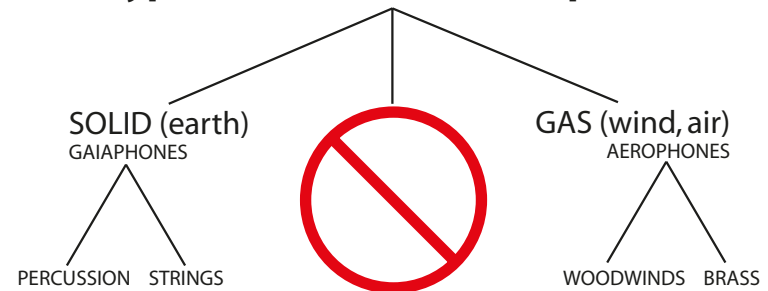
Hydraulophones and the "States of H₂O Orchestra"

Dihydrogen monoxide H₂O exists in the familiar states-of-matter or phases, known as ice (solid), water (liquid) and steam (vapor, gas).

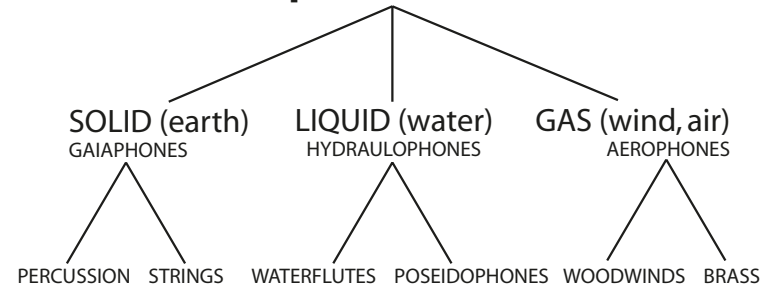
FUNtain's "H₂O Orchestra" demonstrates a wide range of artistic and design creativity and an ability to invent a wide range of new sculptural forms such as musical instruments that exist in all four "Elements" of H₂O: "Earth" (solid H₂O, ice); "Water" (liquid H₂O); "Air" (gaseous H₂O); and "Fire" (H₂O-initiated plasma).

The States-of-H₂O Orchestra was born in Canada in the early 1980s, with the invention of the hydraulophone. It was inspired by the sounds of liquid flowing through valves, by inventor Steve Mann whose work has been shown in numerous museums around the world, including the Smithsonian Institute, National Museum of American History, The Science Museum (Wellcome Wing, opening with Her Majesty The Queen June 2000), Museum of Modern Art (MoMA in New York), Stedelijk Museum (Amsterdam), Triennale di Milano, Austin Museum of Art, and San Francisco Art Institute. Mann also won the Coram International Sustainable Design Award (first place) for this interactive musical aquatic play invention/sculpture. These inventions are covered by an extensive patent portfolio, by patents filed in various countries.

Typical Orchestra (incomplete)



Complete Orchestra

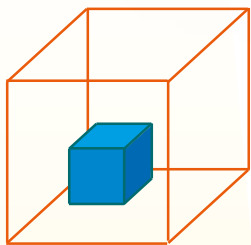


THE FIVE ELEMENTS OF MUSICAL INSTRUMENTATION

1 SOLID “Earth ”



strong bonds



holds shape
fixed volume

GAIAPHONES “Solid Instruments ”

- 1.1 chordophones
- 1.2 membranophones
- 1.3 idiophones



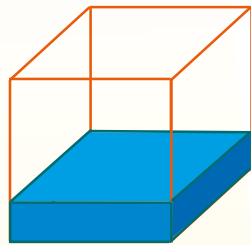
strings

percussion

2 LIQUID “Water ”



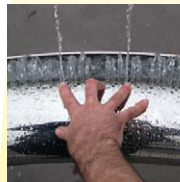
weak bonds



shape matches bottom
of container, flat surface above
fixed volume

HYDRAULOPHONES “Water Instruments ”

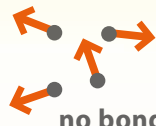
reedless



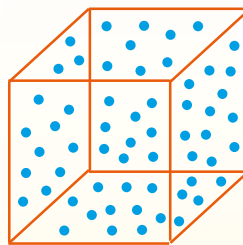
reed-based



3 GAS “Air ”



no bonds



shape matches container
fills volume of container

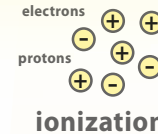
AEROPHONES “Wind Instruments ”



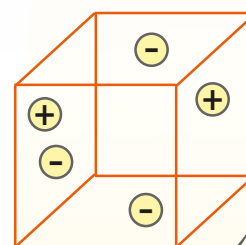
woodwind
instruments

brass
instruments

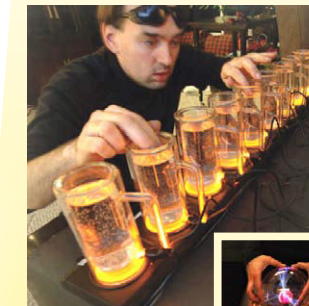
4 PLASMA “Fire ”



ionization

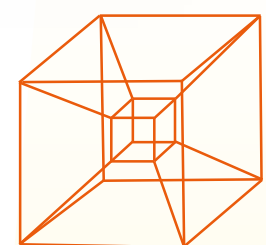


PLASMAPHONES “Plasma Instruments ”



5 QUINTESSANCE “Idea ”

Process or
procedure
not limited
by matter



hyperspace, not limited by
space constraints

QUINTEPHONES “Non-physical Instruments ”

- mechanophones (mechanical comp.)
- electrophones
- optiphones (optical computing)
- biological computing
- neural networks

