



**PIANOTEQ**   
TRUE MODELING

Fourth Generation Piano Instrument

**MODARTT**  
DATA & MODEL COUPLING 

Press release  
Jan 16, 2008

## PIANOTEQ receives innovation awards from Electronic Musician and Remix Magazine



PIANOTEQ 2 has been voted for as the winner of:

- 2008 EM Editors' Choice Award for Most Innovative Product
- 2008 Remix Technology Award in the Most Innovative Software category

These prestigious awards will be featured in the January 2008 issues of Electronic Musician and Remix Magazine.

### PIANOTEQ – the innovation

Using breathtaking technology, PIANOTEQ delivers the future of digital pianos using physical modeling instead of recorded samples, offering an extraordinary playability and expressiveness. The instrument has no static piano samples, no loops, no audio filtering and no quantization noise. PIANOTEQ creates the piano sound in real time, adapting itself to what the pianist does at the keyboard. The breakthrough instrument PIANOTEQ is also the first virtual piano factory. Evolving past acoustic, electric, and sampled pianos, PIANOTEQ introduces the Fourth Generation Piano Instrument.

### Features

- Multiple built-in physically modeled concert pianos
- Beautiful, vivid piano sound
- Extremely responsive - 127 dynamic levels
- Extraordinarily playable
- No piano samples, no loops, no audio filtering
- Fully adjustable parameters for sound shaping
- Adjust tuning, voicing, design - build your own piano
- Beautiful sympathetic resonances
- Microtuning
- Small and fast loading - just 15 MB in size
- Optimized for multi-core CPUs

### PIANOTEQ – the story behind it

The idea of modeling the piano sound is not new, but no relevant solution had been found up to now. The PIANOTEQ history is strongly connected to the outstanding career of Philippe Guillaume, who, so to speak, had three lives in one.

In a first life he was a high level expert in piano tuning and piano restoration. Then at age 31, he simultaneously began his second life with basic studies in mathematics and earned in a very short time the title Doctor in Applied Mathematics, followed by a Professor title, and became Director of the Department of Mathematics of INSA-Toulouse, France. His work on fast computation for a wide range of parameter variations led to the creation of the company Cadoc, which is today a part of Ansys, the world leader in engineering software. The fast piano simulation is an unexpected application of this work. Thanks to his previous work experience he understood deeply the mechanism that leads to the creation of the piano sound. He began creating a mathematical model describing accurately many complex interactions: hammer-strings, strings-soundboard, soundboard-air, and so on. The third life of Philippe Guillaume is devoted to developing and promoting PIANOTEQ.

In addition to the contribution of Philippe Guillaume, the work of his colleague Julien Pommier was of crucial importance as he found solutions to run PIANOTEQ in real time on a standard PC/Mac.

Thanks to the excellent environment and the support provided by the INSA-Toulouse and its prestigious Institute of Mathematics of Toulouse, the help of many colleagues, and a carefully chosen team of experienced musicians, the idea developed into a vivid and convincing digital piano.

### **PIANOTEQ – the KIViR project**

The KIViR project (Keyboard Instruments Virtual Restoration) addresses the case of historical keyboard music instruments which cannot be played in a satisfactory way and which one would like to bring to life again. In this project, MODARTT concentrates on string keyboard instruments like pianos and harpsichords, but an extension to other instruments may be considered in the future. Museums currently involved in the project are Schloss Kremsegg in Austria and Handelhaus in Germany. Virtual copies of historical instruments from these museums or private owners are: Sébastien Erard, Carl Bechstein, François Etienne Blanchet, Donat Schöffstoss, Johann Evangelist Schmidt, Johann Schantz and Conrad Graf.

### **PIANOTEQ – the future**

The PIANOTEQ team is continuously working hard on further developments in close interaction with the users.

The next step is to have PIANOTEQ embedded in digital pianos and silent systems for acoustic pianos. MODARTT is open for collaborations with the goal to make PIANOTEQ a natural tool and instrument companion for all keyboard musicians.

### **PIANOTEQ at NAMM**

The PIANOTEQ team will exhibit at Winter NAMM, January 16-20, at booth #6828 of their U.S. distributor Music Marketing where they will present the latest developments:



---

MODARTT S.A.S.

10 Avenue de l'Europe, 31520 Ramonville Saint Agne, France

Email : [sales@pianoteq.com](mailto:sales@pianoteq.com) | Internet : [www.pianoteq.com](http://www.pianoteq.com)

tél : +33(0)5 34 32 03 30 | fax: +33(0)5 34 32 02 00