



AES

SWISS SECTION NEWSLETTER

86th Issue

INFORMATION ON NEXT MEETING

Innovason Mixing Desk at the Theatre in Basel

Thursday, 30th of January 2003, 17h30 – 20h00 at the Theatre of Basel,
Elisabethenstrasse 16, 4010
Basel

SPEAKERS: Hervé De Caro, Innovason
Robert Hermann, Basel Theater

ORGANIZERS: Joël Godel, David Norman, Decibel SA

LANGUAGE: English, German

*From the development to the end-user, this time in Switzerland:
from Innovason to the Theatre of Basel.*

Biographical Notes

DE CARO Hervé:

Né le 12 Janvier 1970. Diplômé Électronique de l'Université Joseph Fourier de Grenoble. Diplôme Ingénieur du Son SAE de Paris. A écrit un mémoire sur l'étude et la réalisation d'un "Patch numérique à mémoire".

De 1988 à 1999 : Responsable d'un laboratoire de qualification en imagerie infra-rouge. Ingénieur du Son Façade des groupes PHP, Dany Lay's, Tulipe, Lobo, Carmen Rocca,... Ingénieur du son sur l'enregistrement des albums "LOBO" (New rose), "Carmen Rocca" (Flarenasch), "Vibe Addiction" (Sony). Étude et installation de nombreux systèmes de diffusion en salle de concert et installations fixes. Spécialisé dans l'utilisation du MIDI et des Consoles digitales.

Au service d'InnovaSon depuis Septembre 2001 en tant que responsable du Support client avant et après vente.

HERMANN Robert:

Geboren am 29.01.1962 in Donaueschingen. 1968-1972 Besuch der Eichendorff-Grundschule in Donaueschingen.

1972-1973 Besuch des Fürstenberg Gymnasiums in Donaueschingen. 1969 Beginn der musikalischen Ausbildung (Klavier, Flöte). 1973-1981 Besuch des Wenzinger Gymnasiums in Freiburg / Breisgau. 1981 Abitur. 1981-1982 2 Semester Studiengang Schulmusik an der Musikhochschule in Trossingen, Hauptfach Klavier, Nebenfach Fagott. 1982-1987 10 Semester Studiengang Diplom-Tonmeister an der Hochschule der Künste (HdK) in Berlin.

1987 Abschluss des Studiums und Diplom. 1987-1989 Tonmeister beim Stadttheater in Freiburg / Breisgau, in dieser Zeit auch erste Kompositionen von Schauspielmusiken. 1987-1992 freie Mitarbeit bei der Firma AUROPHON als Tonmeister und Aufnahmeleiter bei diversen E-Musik Produktionen (Kammer-musik und Orchester). Seit 1989 Tonmeister und Chef der Ton- / Videoabteilung beim Theater Basel. 1989-1994 unter der Intendanz von Frank Baumbauer Erstellung von diversen Soundtracks und Musiken für Schauspielproduktionen. Seit 1992 CD-Produktionen als freier Tonmeister (Oper, Neue Musik, Jazz). Seit 1994 Dozent an der Musikakademie Basel im Studiengang Audiodesign, Fachgebiet Tonstudioteknik, Aufnahmetechnik, Beschallung und Gehörbildung. 1994 Konzeption einer neuen Beschallungsanlage für die Volksbühne in Berlin. 1995-1996 Tonmeister und Beschallungskonzept für das TAKTLOS Festival Basel. 1996-1997 Tonmeister für das Festival MUSIK DER WELT in Basel, organisatorische Leitung für den Bereich Sound und Backline. 1998 Planung und Installation der neuen digitalen Tonanlage auf der Grossen Bühne im Theater Basel. Sommer 2000 Mitarbeit beim ZMF in Freiburg, Beschallungskonzept und Toningenieur für Konzerte im Zirkuszelt 2001-2002 Konzeption der gesamten Tonanlagen und Installationen im neuen Schauspielhaus in Basel. 2001 Konzeption für den Soundtrack zum Tanztheater SENZA FINE von Joachim Schlömer in Zusammenarbeit mit Max Küng. 2002 im Sommer 2002 Zusammenarbeit mit Joachim Schlömer für die Salzburger Festspiele.

REPORT ON PREVIOUS MEETING

The European CARROUSO Project and Wave Field Synthesis

Thursday, 5th of December 2002, 18h30-20h30 at Studer Professional Audio AG

SPEAKER: Dr.-Ing. Renato Pellegrini

REPORTER: Attila Karamustafaoglu

LANGUAGE: English

35 interested people gathered on the 5th of December at the seminar room of Studer Professional Audio AG in Regensdorf for the section meeting. After a short introduction by the organizer, Dr. Renato Pellegrini started his one-hour presentation. First he described the contents of the project which include the recording, transmission and rendering of three-dimensional audio scenes using the MPEG-4 standard. Then he explained that the focus of the presentation was on two topics, the recording side and the rendering side. Starting then with the recording side, he explained currently developed techniques to capture the acoustics of a recording room, like a church or concert hall, in order to have the necessary data for WFS reproduction. Based on the dutch scientist Huygens' theories, every point within a wave field can be modelled, if the residuum or surrounding line is known. So a measurement technique was developed, where a high quality microphone is mounted on a rod, which turns very slowly and allows measuring a large series of impulse responses along a circular line. Using a mathematical transformation, this data can be converted then to the filter data for the rendering side. Pictures were shown, where this was used in the famous "Concertgebouw" in Amsterdam. Next, some things were said on the loudspeaker systems used for this system. Since the method needs a large number of sound sources closed together, the conventional membrane loudspeakers may not be the best approach. The "Multi Actuator Panel" or MAP technology uses

exciters also used for distributed mode loudspeakers, but has a multitude of them mounted on a panel. Renato Pellegrini pointed out the research done in the project to equalize these accordingly and showed some results in graphical visualizations and why they are often the better choice. The third and last part was then explaining how not only measured acoustics but virtual ones can be combined with the dry source material at the rendering stage. Studer knowledge, mainly developed for the known Virtual Surround Panning VSP, was applied there to wave field synthesis. After a round of questions, the demonstration setup was explained and the visitors were brought to another room, where a 36 channel demonstration setup using four MAPs was prepared. Starting with basic examples of noises or speeches modelled as virtual point sources or plane waves, the complexity was increased to presets with five channel DVD playback over virtual loudspeakers with added virtual acoustics. Having not only a sweet spot but a sweet area with WFS, the listeners were able to walk around and perceive the provided examples not only from one ideal spot as it would have been with multichannel audio. Some classical music examples demonstrated very well the benefits of this technology, which is, as also discussed in a question round, still some years away from common home installations but may soon be commercially used in special places like museums or small cinemas or theatres. A dozen people gathered for the dinner after the meeting.

Dear members of the Swiss AES Section:

We wish you a Merry Christmas and a Happy New Year and want to thank you for your membership. We hope we can offer you again an interesting programme in 2003 and are looking forward to seeing you again at the meetings! Please let us inform you further that there is a newly established service by the AES, which allows you to subscribe to an email list and receive news about the international and European activities of the AES. Subscription is possible at <http://www.aes.org/events/114>. There is still the email list of the Swiss section, which you are very welcome to subscribe to at <http://www.swissaes.org>.

Your Swiss AES Section Committee