

## Historie und Perspektiven der akustischen Photo- und Kinematographie für industrielle Applikationen

G. Heinz  
GFaI, Rudower Chaussee 30, 12489 Berlin, Deutschland  
heinz@gfai.de

### Kurzfassung:

Applying a universal, physical approach into Neural Network Theory I started an application to demonstrate the power of interference systems in 1995. First acoustic images and movies were presented to the public in 1996, mutually the first in the world. Inspecting an airplane the possibility to visualize noise reflections was shown: [www.acoustic-camera.com](http://www.acoustic-camera.com) -> history. Following the first Acoustic Cameras were developed. In September 2001 we sold the first Acoustic Camera system to Porsche. Acoustic Cameras calculate a sound pressure map of an object as received at the location of immission. Distances cover a range between 0,3 and 300 meters with different, interface-compatible microphone arrays. All arrays contain an video camera, the overlay between image and acoustic map occurs automatically. A lot of new tools and working methods of general attention between space, time and frequency were developed. They increase the efficiency in the domain of acoustic analysis in many industrial fields dramatically. Beside physical effects of general attention some tools and methods were presented together with their working principles. Possibilities and limitations in relation to complementary methods are discussed (intensity, holography, vibrometry).

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Markus Fruhmann, Hugo Fastl, AG Technische Akustik  
Lehrstuhl für Mensch-Maschine-Kommunikation  
TU München, Arcisstr.21, 80333 München

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Anzahl der Wörter in der Zusammenfassung: 182  
Stichwörter: noise - localization - acoustic - camera  
Klassifikation: Messtechnik  
Strukturierte Sitzung: Nicht spezifiziert  
Präsentationsart: mündlicher Vortrag bevorzugt  
Benötigte Ausstattung: Tageslichtprojektor  
Anmeldung: 129035804 - Heinz Gerd - 0 0 nicht bezahlt