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International Workshop Tomography and Acoustics: Recent developments and methods

06. - 07.03. 2001 in LEIPZIG

Hrsg.: K. Arnold, A. Ziemann,
G. Tetzlaff, V. Mellert und A. Raabe

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International Workshop

Tomography and Acoustics: Recent developments and methods

6 - 7 March 2001

University of Leipzig
LIM - Institute for Meteorology
Germany

Scientific Organising Committee:
V. Mellert, University of Oldenburg
G. Tetzlaff, University of Leipzig
A. Raabe, University of Leipzig

Local organisers:
A. Ziemann, University of Leipzig
K. Arnold, University of Leipzig

Program International Workshop
Tomography and Acoustics: Recent developments and methods

06. March 2001, Tuesday

Session 1: *Tomography* (M. Taroudakis, IACM/FORTH, Greece)

Session 2: *Acoustics* (V.E. Ostashev, ETL/NOAA, USA)

07. March 2001, Wednesday

Session 3: *Application to the Atmosphere* (D.K. Wilson, U.S. Army Res. Lab., USA)

Session 4: *Application to the Ocean* (F. Gaillard, IFREMER, France)

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Measurements are the experimental tool that allows to identify processes and they thus form the basis of the understanding of these processes. However, the times when simple instruments and similarly simple experimental setups provided scientific breakthroughs are gone by.
Nowadays the experiments do need most refined approaches and in many cases a piece of information on a process cannot be retrieved from measured data without a very sophisticated processing. It is in particular that complex spatial structures do require such methods. In many cases the complexity of the structures is such that it is not even possible to retrieve absolute quantities from measurements, but merely relative information on the spatial structure. For many applications this already means a wealth of information that beforehand could by no means be made available. To open the access to the measurements of otherwise inaccessible complex matter is the basic motivation to apply tomographic methods allowing to develop new synoptic views.
Therefore, this workshop should bring scientists from different disciplines together to make them exchange their ways of how to tackle complexly distributed parameters hidden the investigated medium they each do study in their own research areas. If after the workshop the participants return home with the impression to have heard and seen something new for them, the goal of the organisers is achieved.

We would like to take this opportunity to acknowledge the friendly support of the German Research Association (Deutsche Forschungsgemeinschaft) and the Saxon Ministry of Science and Art (Sächsisches Staatsministerium für Wissenschaft und Kunst) as well as Sinus-Meßtechnik GmbH (Leipzig), METEK GmbH (Elmshorn) and Scintec AG (Tübingen).
Furthermore, we wish to express particular thanks and gratitude to the participants who contributed to this Workshop. The Workshop has many impressive papers to be presented, representing the actual developments in tomography, acoustics, or together in both disciplines. The interaction between all participants will amount to the special value of this meeting. With this in mind we wish all delegates an active exchange of ideas, many new personal contacts as well as the refreshing of existing connections, and last but not least a pleasant stay in the University and Fair City Leipzig.

Scientific Organising Committee
Gerd Tetzlaff (Leipzig), Volker Mellert (Oldenburg) and Armin Raabe (Leipzig)

Local Organising Committee
Astrid Ziemann and Klaus Arnold (Leipzig)