

MONDAY 7 APRIL 2008

08:25 09:15 **Registration**

09:15 09:35 **Welcome Address (M. Carbonaro and T. Arts)**

09:35 10:20 **Key note on Pressure Sensitive Paints**

C. Klein

10:20 10:35 **Coffee break**

10:35 **Session on Optical Measurements**

Chairman: C.H. Sieverding

10:35 10:55 Development of a 1-camera Doppler Global Velocimeter

J.A.C. Berthiau, S. Goguey, X. Ottavy

10:55 11:15 PIV measurement of vortical structures in rotating channels

A. Di Sante, R.A. Van den Braembussche

11:15 11:35 PIV application to transonic axial and radial compressors

M. Voges, C. Willert, M.W. Müller

11:35 11:55 Tunable diode laser absorption measurements in an impulse hypervelocity facility

J. M. Meyers

11:55 12:15 Methodology to implement PSP technique in a transient facility

J. Michalek, G. Paniagua, M. Vergalla, N. Zerelli, M. Tulkens

12:15 12:35 Combined high speed stereoscopic PIV measurements and unsteady pressure measurements in the vaneless diffuser of a centrifugal pump

A. Dazin, S. Coudert, P. Dupont, G. Caignaert, G. Bois

12:35 12:55 Study of coherent structures in coaxial jet noise using PIV

B.H. Timmerman, J.P. Bryanston-Cross

12:55 14:00 **Lunch**

14:00 **Session on Tip clearance and Tip timing**

Chairman: X. Ottavy

14:00 14:20 Metrology considerations for calibrating turbine tip clearance sensors

T.A. Holst, J.L. Geisheimer, M. Hafner, S. Billington, D. Burgess

14:20 14:40 Single blade tip clearance measurements in a transient rig

M. Tulkens, G. Paniagua, A. Steiner

14:40 15:00 Spectral estimation of bladed tip-timing data

C. Stephan, M. Berthillier, J. Lardies, A. Talon

15:00 15:20 Assessment of the reassignment technique applied to vibratory diagnosis on turbomachinery

G. Pargade, A. Talon

15:20 15:35 **Coffee break**

15:35 **Session on MEMS, fast prototyping, new rigs**

Chairman: G. Pavesi

15:35 15:55 CMOS MEMS Hot-Film Sensors

I. Haneef, S.Z. Ali, F. Udrea, J.D. Coull, H.P. Hodson

15:55 16:15 The corona mass flow meter

F. Laurantzon, N. Tillmark, P.H. Alfredsson

16:15 16:35 Efficiency measurement in the qinetiq turbine test facility with temperature distortion and swirl: the mass flow rate measurement problem

P. Beard, T. Povey

16:35 16:55 Rapid prototyping for wind tunnel testing and instrumentation

R.L. Thomas, H.P. Hodson

16:55 17:15 Main factors of application of active methods of the boundary layer control to the compressor blade cascade flow

M. Matejka, P. Safarik

17:15 17:35 Experimental study of the efflux of an aero-engine in post-combustion regime : Influence of the environmental conditions

P. Vyvey, W. Bosschaerts, R. Wagemakers

17:35 18:30 **Visit of the VKI laboratories**

18:30 **Reception**

20:00 **Social Dinner at the restaurant "Les Asturiennes"**



TUESDAY 8 APRIL 2008

09:00	Session on Pressure Measurements	Chairman: P. Safarik
09:00 09:20	Effects of a rotating aerodynamic probe on the flow field of a compressor rotor	J. Lepicovsky
09:20 09:40	Probes in transonic flow	F. Kost
09:40 10:00	Three-hole pressure probes at large	K.M. Argüelles, J.M. Fernandez, E. Blanco
10:00 10:20	Estimation of turbulence by single-hole pressure probes	G. Persico, P. Gaetani, B. Paradiso
10:20 10:40	Characterization and first application of a thin-film electret unsteady pressure measurement technique	D.M. Vogt, J.E. Fridh, T.H. Transon

10:40 10:55 Coffee break

10:55	Session on Heat Flux and Temperature Measurements	Chairman: H. Hodson
10:55 11:15	A post processing procedure for the evaluation of adiabatic and overall effectiveness of effusion cooling geometries	B. Facchini, L. Tarchi, L. Toni
11:15 11:35	Application of the transient heater foil technique for heat transfer measurements	M. Jonsson, P. Ott
11:35 11:55	Novel calibration method for an infrared thermography system applied to heat transfer experiments in hot channels	M. Ochs, A. Schulz, H.-J. Bauer
11:55 12:15	A software module for correcting pyrometer measured temperatures	M.F.G. Cremers, R.A. Rooth

12:15 13:20 Lunch

13:20	Session on Data processing techniques	Chairman: G. Persico
13:20 13:40	A time-frequency post-processing technique for the characterization of the unsteady phenomena in the turbomachines	G.Pavesi, G. Cavazzini, G. Ardizzon
13:40 14:00	An integrated tool for turbomachinery blading design and analysis	P.K. Zachos, M. Pappa, G. Mansour, I. Tsiafis, A.I. Kalfas
14:00 14:20	Evaluation of blade cascade characteristics in experiments carried out with humid air	N. Martin
14:20 14:40	Experimental setup for detailed secondary flow investigation by two-dimensional measurement of total pressure loss coefficients in compressor cascades	K. Liesner, R. Meyer
14:40 15:00	Experimental investigation on the nearfield aeroacoustic sources of a low speed axial fan	S. Bianchi, A. Corsini, F. Rispoli, A.G. Sheard

15:00 15:30 Closure of the Symposium by T. Arts and G. Paniagua