

AIRCRAFT NOISE REDUCTION BY FLOW CONTROL AND ACTIVE/ADAPTIVE TECHNIQUES

Program of the CEAS/XNOISE Workshop, 25-26 September 2014
Vilnius Gediminas Technical
University, Lithuania

25 of September 2014

12:00 - 13.00 Registration

13:00 -13:45 Lunch

13.45 Introduction

14.00 Keynote lecture 1:

ON INSTABILITY WAVE CONTROL IN TURBULENT JETS

Victor Kopiev, TsAGI, Russian Federation

1st Session “**ENGINE NOISE CONTROL**”

Chairs: Jan Delfs and Urban Emborg

14.45 INCREASE AND DECREASE OF THE NOISE RADIATED BY HIGH-REYNOLDS-NUMBER SUBSONIC JETS THROUGH PLASMA SYNTHETIC JET ACTUATION

O. Léon, D. Caruana (ONERA), T. Castelain (École Centrale de Lyon), France

15.15 *Coffee break*

15.45 STAR: AN EFFICIENT MICRO-JET SIMULATOR FOR ACTIVE CONTROL IN CEPRA19. SOME APPLICATIONS

D. Gély, O. Piccin (ONERA), France

16.15 ACTIVE CONTROL OF FAN TONES BY MEANS OF TRAILING EDGE BLOWING

L. Enghardt, P. Kausche (Engine Noise Department, Berlin), DLR

16.45 PARAMETRIC STUDY OF AIR CURTAINS FOR AIRFRAME NOISE REDUCTION

G. Bennett, J. Kennedy, S. M. Ramirez, Z. Kun, E. Neri (Trinity College Dublin), Ireland

17.15 **Panel discussions and conclusions to the 1st Session**

19:00 Workshop dinner

26 of September 2014

9.00. Keynote lecture 2:

ACTIVE NOISE TECHNOLOGICAL SOLUTIONS IN AIRCRAFT ENGINE DESIGN // Dominique Collin (SNECMA), France

2nd Session “**AIRCRAFT NOISE CONTROL**”

Chairs: Denis Gély and Daniel Juve

9.45 ON ACTIVE NOISE REDUCTION IN AN AIRCRAFT CABINS AND ENGINE NOZZLES

J. Oliveira, L. Campos, F. Lau (Instituto Superior Técnico), Portugal

10.15 ACTIVE CONTROL OF NOISE GENERATION IN A ROD-AIRFOIL CONFIGURATION

L. Siozos-Rousoulis, G. Ghorbaniasl, C. Lacor (Vrije Universiteit Brussel), Belgium

10.45 *Coffee break*

11.15 SLAT NOISE REDUCTION BY MEANS OF ADAPTIVE LEADING EDGE DEVICES

M. Pott-Pollenske, J. Wild, M Herr (German Aerospace Center, Institute of Aerodynamic and Flow Technology), A. Rudenko (German Aerospace Center, Institute of Composite Structures and Adaptive Systems), A. Büscher (Airbus Operations, Bremen), Germany

11.45 VALIDATION OF HYBRID NUMERICAL METHODS FOR AEROACOUSTIC SIMULATIONS IN AN INDUSTRIAL ENVIRONMENT

D. Boenke, J. Siebert, R. Ewert, J. Delfs (German Aerospace Center, Institute of Aerodynamic and Flow Technology), Germany

12.15 Keynote lecture 3:

EXPERIENCE OF THE NATIONAL AVIATION UNIVERSITY IN THE APPLICATION OF ACTIVE NOISE CONTROL IN AN AIRCRAFT CABIN //

O.Zaporozhets, V.Tokarev (National Aviation University), Ukraine

13.00 **Panel discussions to the 2nd Session and conclusions to Workshop**