REGISTRATION

Registration fees paid before 14 August 2011Participant250 CHFStudent100 CHF

Registration fees paid <u>after</u>14 August 2011Participant375 CHFStudent150 CHF

Included in the fee is the conference documentation (book of abstracts and CD of presentations), the lunches and coffee breaks, as well as the workshop dinner.







Acoustic Liners and Associated Propagation Techniques

15th CEAS-ASC WORKSHOP 1st SCIENTIFIC WORKSHOP OF X-NOISE EV

October 13-14, 2011

organized by Ecole Polytechnique Fédérale de Lausanne, Switzerland



sponsored by





International Journal of Aeroacoustics www.multi-science.co.uk

SCOPE OF THE WORKSHOP

Attenuation of engine noise by acoustic liners in turbofan ducts remains one of the most effective methods of achieving aircraft noise reduction. Acoustic liners are routinely installed in the intake, bypass and inter-stage regions of turbofan engines to reduce fan noise, and in the hot stream exhaust ducts to mitigate turbine and combustion noise. Their presence attenuates selectively the acoustic modes excited by these sources and redistributes the transmitted acoustic energy in the far field. Predicting far field EPNL in the presence of liners demands the use of analytic, numerical or data-based prediction models to account for the effects of lined surfaces and geometry changes in the ducted sections of the engine as the sound propagates to the far field.

Contributions are invited to the above workshop which touch on all aspects of liner modelling, liner impedance prediction, in situ liner performance and propagation methods. In particular, submissions are invited in the following areas:

- **1.** Novel liner concepts, passive and adaptive.
- 2. Measurement of liner impedance, techniques and applications.
- 3. Analytic, numerical and empirical methods for predicting liner impedance.
- **4.** Analytic, numerical and empirical methods for predicting the effect of liners on far field sound pressure.
- 5. Optimisation of liners to reduce community and/or interior noise.

KEYNOTE LECTURES

Daniel J. Bodony, University of Illinois at Urbana-Champaign, USA

 \ll Direct numerical simulation of acoustic liners : results and time-domain modeling \gg

Andrew J. Kempton, Rolls-Royce, UK

 \ll Acoustic liners for modern aero-engines \gg

Jean-Pierre Coyette, Free Field Technologies, Belgium

 \ll Computational tools for modeling acoustic liners and propagation : review of some key ingredients and challenges \gg



SCIENTIFIC COMMITTEE

- <u>CO-CHAIRS</u> **Pénélope Leyland**, EPFL, Lausanne, Switzerland **Cécile Deslot**, EPFL, Lausanne, Switzerland
- MEMBERS Jeremy Astley, ISVR (UK) Hans Bodén, KTH (Sweden) Dominique Collin, SNECMA (France) Henk van der Wal, NLR (Netherlands) Andrew J. Kempton, Rolls Royce (UK)

CALL FOR PAPERS

The language of the workshop will be English. The interested speakers are invited to submit their abstracts on no more than 2 pages including authors' names and affiliations, in electronic form (Word). The speakers must provide their manuscript or their presentation in advance in electronic form (PDF or Power Point) so as to facilitate the preparation of the proceedings.

<u>KEYDATES</u>	19 June 2011	Submission of abstracts
	17 July 2011	Notification of acceptance
	14 August 2011	Advance registration

<u>PUBLICATIONS</u> After the workshop, appropriate presentations will be recommended for submission to International Journal of Aeroacoustics (IJA).

