# PHOENICS News



CFD: Past, Present and Future by Brian Spalding - Lecture at the Sixteenth Leontiev School-Seminar

From 21<sup>st</sup> to 25<sup>th</sup> May, Brian Spalding visited the St Petersburg Technical University where he was one of the handful of foreign academics invited to honour Professor Alexander Ivanovich Leontiev on the occasion of his 80<sup>th</sup> birthday.



Brian was one of 3 keynote lecturers to open the conference proceedings, attended by some 200 students and academics, and he took the opportunity both to reflect on the history of CFD and to consider its future. For more about this, click www.cham.co.uk/docs/newssummer07.pdf.

### Commercial Update

CHAM has revised its pricing policy for PHOENICS licensing for the first time in many years, effective from May 2007.

The main changes are:

- Inclusion of the recompilable option at no extra charge (i.e. a price decrease);
- Reduction in UNIX-version pricing;
- New Academic licence costs reduced.
- Baseline commercial licence fees increased;
- PHOENICS Online charges increased;

Other changes include:

- New parallel- and 64-bit options;
- Increased man-time charges.

For details of how these changes may affect you, please contact <u>Sales@cham.co.uk</u>.

### What's in the latest PHOENICS?

PHOENICS-3.6.2 [2006] has been updated for its June 2007 release. Updated features include:

#### Changes to VR Editor

- The objects to be included or excluded from the force summation can be selected from a list.
- In Flair/HOTBOX the file holding the fancharacteristics-curves can be edited directly from within the interface.
- In Flair/HOTBOX the fan options shown in the fan data file are presented as a selectable list.

#### Changes to the Earth Solver

- When PARSOL and GENTRA are active together, the particles will bounce from the true facetted surface of the object. Previously they bounced from the underlying fully-blocked cells, which could give rise to spurious reflection.
- The calculation of forces and moments on blockages has been extended to non-facetted objects - those which use cube\*\*\*.dat as a geometry file. In addition, more control has been added so that the user can select which objects are included or excluded from a global summation of force and moment. The drag-and-lift-coefficients can also be printed if the user supplies normalising areas.

#### Changes to VR Viewer

- The tabs of the Options dialog have been updated to provide more control over the displayed image without having to click the toolbar or handset icons.
- The user can select any 1, 2 or 3 variables to use as vector components.
- The vector component normal to the plotting plane can be toggled on or off to assist in visualising secondary flows.

For more background to these, and earlier changes, see "What's New in PHOENICS": <a href="https://www.cham.co.uk/phoenics/d">www.cham.co.uk/phoenics/d</a> polis/d docs/tr006/tr006.htm which will be updated shortly.

## PHOENICS News



### Jeremy Wu moves to China Office



Dr Jeremy Wu, former Deputy Managing Director and long-standing CHAM officer returned home to China in April 2007.

He continues to represent CHAM's interests in the important Chinese and Far Eastern markets, whilst operating from the CHAM Shanghai offices.

It is certainly not "Goodbye", as we expect to see Jeremy on several occasions over coming years. We take this opportunity to give him our very best wishes in this new venture.

### F1 VWT expands in Malaysia

The popularity of the Formula-1 in Schools programme continues to go from strength to strength - see: <a href="www.flinschools.co.uk">www.flinschools.co.uk</a>. The project started in 2000, and was based solely in the UK. In 2002, there were four countries involved - and, in less than 5 years since, that number has grown to over twenty.

Now there are thousands of schools competing in regional, national and international events around the world.



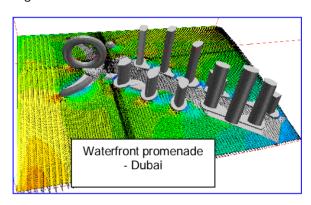
The national champions from the UK will be treated by the F1 in Schools organisers to a visit to Silverstone to meet British F1 drivers, David Coulthard, Jensen Button and McClaren's new F1 sensation, Lewis Hamilton.

During April and May this year, we welcomed 114 new schools in Malaysia for which we supplied the Mk4 release of the F1 VWT software. Remember new students, help and guidance is always on-hand via F1 vwt help@cham.co.uk.

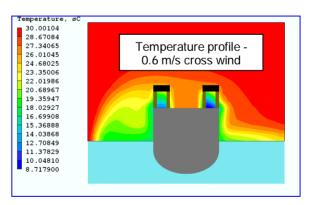
To learn more about the F1 VWT product, click on: <a href="https://www.cham.co.uk/DOCS/f1\_VWT\_Flyer.pdf">www.cham.co.uk/DOCS/f1\_VWT\_Flyer.pdf</a>.

### CHAM Project Update

Several contracts were of notable interest in early 2007. We particularly welcome two new customers in Dubai, UAE - a fairly new territory for PHOENICS expansion. Atkins Global and the British University in Dubai have become both users of, and trainers for, the PHOENICS/FLAIR building services module, for modelling internal and external flow scenarios in support of the massive construction 'explosion' occurring in the region.



Houston-based risk-assessment engineers, IRC Americas, are using PHOENICS extensively for a broad spectrum of hazard-related analyses. Aspects of their work involve the potential consequence of subterranean jet-flame incidents upon the local built environment, and LNG releases from offshore structures.



For more about IRC Americas services in environmental and risk assessment, click on:

www.irc-americas.com

# PHOENICS News



### **CONFERENCE NEWS**

### 2007 Benelux User Meeting



The 2007 Benelux User Meeting, organised by Dutch agent, A2TE, will be held at the Aristo in the centre of Eindhoven, the 'city of light.'

ARISTO EINDHOVEN

The date for this 1-day event is 5<sup>th</sup> September 2007. CHAM will provide an overview of the latest PHOENICS features to accompany customer presentations.

For further details and/or registration, please contact Geert Janssen <u>gjanssen@a2te.nl.com</u> or <u>sales@cham.co.uk</u>.

### PHOENICS Workshops in Oz



During October this year, ACADS-BSG is organising two PHOENICS 2007 workshop sessions in Melbourne and Sydney.

Contact Mr Murray Mason at <a href="mailto:acadsbsg@ozemail.com.au">acadsbsg@ozemail.com.au</a> for further details.

### 2008 International PHOENICS Users Conference - watch this space!



Greek agents, Messrs SYBILLA, have asked to host the next international PHOENICS Conference in Athens, Greece, provisionally arranged for September 2008.

Details of venue and programme will be announced on CHAM's web site over the next three months, with a Call for Papers and Registration Forms.



The conference organiser will be Dr Sakis N Karayannis, email: <a href="mailto:a.n.karayannis@sybilla.gr">a.n.karayannis@sybilla.gr</a>.

### 2008 International Conference on Advances in Computational Heat Transfer



The International Centre for Heat and Mass Transfer (ICHMT) is pleased to announce

### CHT-08: ADVANCES IN COMPUTATIONAL HEAT TRANSFER

an international symposium scheduled to take place in Marrakech, Morocco on 11<sup>th</sup> to 16<sup>th</sup> May 2008.

It will be held "to honour the 85th birthday of Professor Brian Spalding, FRS, and in recognition of his outstanding contributions to computational fluid dynamics and heat transfer."

The goal of the symposium is to provide a forum for the exposure and exchange of ideas, methods and results in computational heat transfer.

More information is available on: <a href="http://www.ichmt.org/upcoming-meetings/meetings.html">http://www.ichmt.org/upcoming-meetings/meetings.html</a> and then access Computational Heat Transfer CHT-08.





### PHOENICS USER MEETING BOOK NOW!

The Benelux PHOENICS User Meeting will be held on 5<sup>th</sup> September 2007 at the



### ARISTO EINDHOVEN

Vestdijk 30, 5611 CC Eindhoven, Tel: + 31 (0) 40 243 6297 http://www.aristo.nl/index.html

featuring technical contributions by PHOENICS Users throughout the region and an overview of PHOENICS (2007).

For further details and registration, please contact:

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