

March 17th, 2009 event

dinner and technical presentation:
**The Evolution and Growth of
Applied Computational Fluid
Dynamics (CFD)**



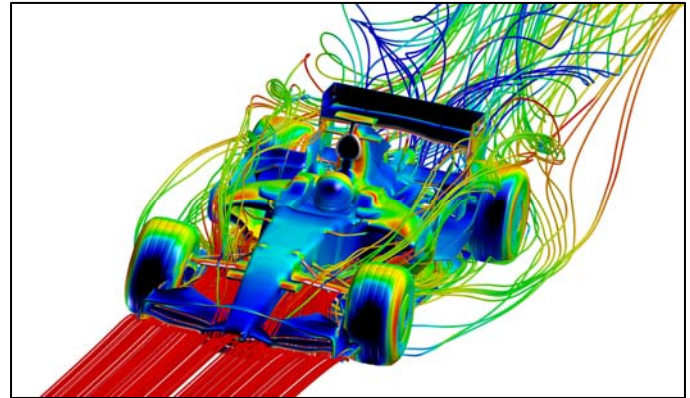
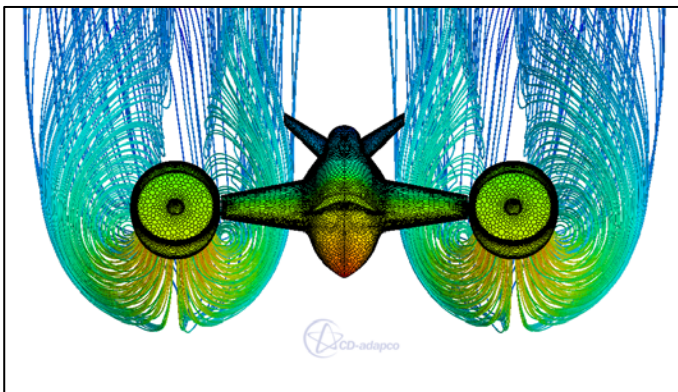
Please join the St. Louis Section of ASME for dinner and presentation by **David L. Vaughn**, Director of Aerospace and Defense Industry

Sectors, **CD-adapco Inc.** This is a joint **ASME/AIAA** event. In the beginning there was external aerodynamics. Within the Aerospace industry, CFD was born to analyze airflow around the vehicles of the late 20th century. As we approached the turn of the century, CFD methods and software evolved to the point where engineers outside the aerodynamics department could apply CFD to their problems. Intertwined with this growth in applications came the substantiation of and subsequent movement to commercial off-the-shelf (COTS) CFD software. In parallel its growth in the Aerospace industry, CFD was growing equally fast in other industries such as automotive, marine, nuclear, etc. However, the growth within each industry took radically different paths. Early applications in these industries included combustion and free surface modeling among others.

In this presentation we will look at the evolution and growth of applied CFD in by discussing the following topics:

- A brief history of CFD (and related technology).
- The application of COTS CFD Software in industry.
- A future vision of applied engineering simulation.

We will wrap-up our discussion with a live demonstration of STAR-CCM+ on one of the applications discussed.



CD-adapco is the leading provider of engineering simulation solutions for fluid flow, heat transfer and stress, including CFD software, CAD-embedded CFD, CAE consulting services and training. Integrated CAE process allows engineers to focus more on product design by giving them a single easy to use interface to automatically handle complex models through the complete analysis cycle: pre-processing, meshing, solution, post-processing. CD-adapco's solutions are used in auto, aerospace, appliances, buildings, chemical process, electronics, environmental, marine, offshore structures, pharmaceuticals, power generation, rail, and turbomachinery.

David L. Vaughn joined CD-adapco in 2005, and he oversees CD-adapco's aerospace and defense business. He began his career as a computational aerodynamicist at Gulfstream Aerospace on the G-V business jet design. Mr. Vaughn then joined Lockheed Martin as an applied aerodynamicist. He was appointed as the aerodynamics lead on the Navy Common Support Aircraft (CSA) program. Mr. Vaughn continued his career at Synaps, Inc. and Engineous Software on the development and application of multidisciplinary design optimization software.

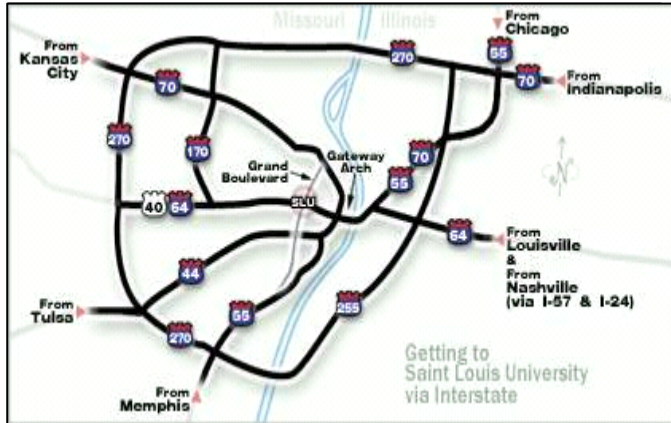
When: Tuesday March 17th, 2009, arrive 5:30 p.m, 5:30-6 cash bar, 6-6:45 dinner, 7-8 lecture, 8:30 end of meeting.
Where: Saint Louis University, Busch Student Center Building, on East side of North Grand Blvd., Room #170.
Cost: ASME members, \$20, ASME students \$10.
Menu: vegetable, lasagna, mostaccioli with meat sauce, salad, bread, italian cream puffs, iced tea.
Reservations: ASME members call Dr. K. Ravindra 314-977-8438 or email ravindrak@slu.edu. by Friday March 13th.
Parking: in Laclede Street garage one block west of BSC.
Directions: to intersection of North Grand Blvd and Laclede Street. HWY40 is closed west of Kingshighway, lots of luck
Map: see map on next page

ELECTION

BALLOTING ENDS FOR 2008/2009 NOMINATING COMMITTEE, ASME ST. LOUIS SECTION:

Voting for the nominating committee will be closed as of Thursday March 5th 2009. Results will be announced at our March 17th event by Mary Hammond, or contact phone 314-335-6944 or email mary.hammond@edm-inc.com for results.

MAP TO MARCH 17 EVENT AT ST LOUIS UNIV.



Volunteers needed for career night visits with students

St. Louis area working engineers and retired engineers are sought for visits with mechanical engineering students. We want to have informal group discussions to give the students more insight on what to expect in their careers after graduation. Evening visits between senior members and student members at UMR, SIUE, SIUC, SLU are open, dates to be determined. If you would like to join in, please call John Keplinger at 314-845-7775 or e-mail john.keplinger@gmail.com.



Please join us at the next ASME-STL Board Meeting 6:00 p.m. Tuesday, April 7th at Buffalo Brewing Company, 3100 Olive Street, St Louis MO 63103, one block east of Compton Ave.

ASME-STL Section Program Schedule for 2009, John Keplinger - Vice Chair:

April - Biomass energy event to be determined.

May - event to be determined.

Are you an expert in a specific field or work in a plant that other local ASME members would enjoy touring? Please contact John Keplinger if you'd like to share your talents with the section....keplinger.js@pg.com

WEBMASTER

St. Louis members, we need a volunteer **webmaster** to update and maintain our St. Louis section web page. Our website is hosted by ASME international (sections.asme.org). Please contact Mary Hammond at EDM Inc. 314-231-5485.

NASA's Great Observatory Program: Hubble and Beyond



For more than 15 years, NASA has been exploring the wonder of our Universe with a fleet of telescopes in orbit around Earth. Join us for an informal presentation on the findings from this exploration, the upcoming Hubble repair mission, and the future generation of space telescopes.

Presented by David Ritchey of James S. McDonnell Planetarium,

Wednesday, March 11; 7:30 pm

At Schlafly Bottleworks, 7260 Southwest Avenue, Maplewood, MO 63143 (at Manchester Rd.)

Free and open to everyone.

For more information call (314) 289-1437, or e-mail to dritchey@slsc.org.

CAREER LINK WWW.ASME.ORG/JOBS

Your one-stop resource for job hunting strategies, career management, workplace trends & advice and the only job board dedicated exclusively to Mechanical Engineers.

ASME 2008/2009	St. Louis Section	Board Members	Contact Info
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