

**Research Consortium for Multidisciplinary System Design:
Third Annual Workshop
July 17–18, 2008
Massachusetts Institute of Technology**

Agenda

Day 1: Thursday July 17

9:00am–9:30am: Welcome and introductions. Workshop purpose and goals.

9:30am–12:30pm: Industry/government presentations.

Multidisciplinary Analysis and Optimization in the Fundamental Aeronautics Program at NASA, Steve Smith, NASA Ames.

Computational Design Applications for the Air Force Research Laboratory, Maxwell Blair, AFRL.

The EMBRAER MDO Initiative, Luis Carlos de Castro Santos, Embraer.

Industry Perspective: Expanding MDO Use, Michael Nolan, Raytheon.

12:30pm–1:30pm: Lunch

1:30pm–2:15pm: *MDO Frameworks and Approaches*, Joaquim Martins, University of Toronto.

2:15pm–3:00pm: Industry challenges in using state-of-the-art MDO frameworks and approaches. (All: Discussion, led by Martins.)

3:00pm–3:15pm: Break

3:15pm–4:15pm: π MDO Overview and Demo, Joaquim Martins, University of Toronto.

4:15pm–5:15pm: MDO Test Problem Suite. (All: Discussion, led by Martins.)

6:00pm: Reception at 100 Memorial Drive (light dinner).

Day 2: Friday July 18

8:30am–9:00am: Geometry challenges and approaches in multidisciplinary system design (All: Discussion, led by Kroo/Willcox).

9:00am–10:30am: *Using Parametric CAD for Analysis, Design and Optimization*, Robert Haines, MIT.

10:30am–10:45am: Break

10:45am–11:15am: *Experiences with Production Validation & Verification and Uncertainty Calibration at Sandia*, Brian Adams, Sandia National Laboratories.

11:15am–12:15pm: *Latest Developments in Uncertainty Quantification and Design Under Uncertainty within the DAKOTA project*, Michael Eldred, Sandia National Laboratories.

12:15pm–1:15pm: Lunch

1:15pm–3:15pm: Consortium Research Overview and Research Status. Multifidelity modeling. Methods for design under uncertainty. Hybrid optimization. System of systems. (MIT/Stanford/Purdue)

3:15pm–3:30pm: Break

3:30pm–4:30pm: Discussion: Future Research Directions, Challenges.

4:30pm: Adjourn.