

**COMPFRAME 2005**  
**Atlanta, Georgia, June 22-23, 2005**

WORKSHOP AGENDA

WEDNESDAY, JUNE 22		
TIME		PROGRAM
FROM	TO	
08:30	9:00	REGISTRATION
09:00	09:30	<i>Productivity and Performance Through Components: The ASCI Sweep3D Application.</i> Samit Jain ,Matthew Crocker, Nasim Mahmood and <u>James C. Browne.</u>
09:30	10:00	<i>Applying Component Technology to Coupled Fusion Simulation</i> Donald B. Batchelor, <u>Lee A. Berry</u> , Wayne A. Houlberg, E. F. Jaeger, David E. Bernholdt, Wael R. Elwasif, Ed F. D’Azevedo, James A. Kohl, and Shuhui Li.
10:00	10:30	<i>SimTK Framework for Physics-based Simulation of Biological Structures.</i> <u>Michael Sherman</u>
10:30	11:00	<i>Comparison of Frameworks for Next Generation Multiphase Flow Solver, MFIX. A Group Decision-Making Multiphase Flow Solver.</i> <u>A. Gel</u> , S. Pannala, M. Syamlal, T. J. O’Brien and E. Gel.
11:00	11:30	<i>Coupling Weather and Climate Models with the Earth System Modeling Framework.</i> <u>Shujia Zhou</u> , V. Balaji, Carlos Cruz, Arlindo da Silva, Chris Hill, Erik Kluzek, Shep Smithline, Atanas Trayanov, Weiyu Yang.
11:30	11:45	COFFEE BREAK
11:45	13:00	<b>Panel I:</b> How can Computational/Component frameworks better support applications?
13:00	14:00	LUNCH
<b>Invited Talks</b>		
14:00	14:45	<i>Using High Level Languages in Computational Frameworks.</i> Kathy Yelick.
14:45	15:30	<i>The Cactus Framework.</i> Tom Goodale.
15:30	15:45	COFFEE BREAK
15:45	16:15	<i>Component Based Applications Programming within a Service-Oriented Grid Environment.</i> <u>Rainer Schmidt</u> , Siegfried Benkner, Ivona Brandic, and Gerhard Engelbrecht
16:15	16:45	<i>Exploring the Design Space for CCA Framework Interoperability Approaches.</i> Michael J. Lewis, <u>Madhusudhan Govindaraju</u> and Kenneth Chiu
16:45	17:15	<i>High-Speed Network and Grid Computing for High-End Computation: Application in Geodynamics Ensemble Simulations.</i> <u>Shujia Zhou</u> , W. Kuang, W. Jiang, P. Gary, J. Palencia, and G. Gardner.
17:15	17:45	<i>Brokering Grid Services for Distributed Visualization.</i> <u>Cornelius Toole, Jr.</u> and Loretta Moore.
17:45	18:30	<b>Panel II:</b> What is the right role for Component/Framework technology in distributed computing?

**APPLICATIONS AND COMPONENT TECHNOLOGY**  
Chair: D. Bernholdt

**THE GRID AND COMPONENT TECHNOLOGY**  
Chair: John Shalf

WORKSHOP AGENDA (DAY II)

THURSDAY, JUNE 23			
TIME		PROGRAM	
FROM	TO		
8:30	9:00	<i>On the Role of Self-Similarity in Component-Based Software.</i> <u>Rob Armstrong</u> , Benjamin A. Allan, David E. Bernholdt and Wael Elwasif	PROGRAMMING MODELS Chair: Jim Browne
9:00	9:30	<i>The # Model for Parallel Programming: From Processes To Components with Insignificant Performance Overheads.</i> <u>Francisco H. de Carvalho Junior</u> and Rafael D. Lins	
9:30	10:15	<b>Panel III:</b> Are Component/Framework technologies influencing/responding to programming models?	
10:15	10:30	COFFEE BREAK	
10:30	11:00	<i>Ccaffeine Framework: Composing and Debugging Applications Interactivity and Running Them Statically.</i> <u>Benjamin A. Allan</u> and <u>Rob Armstrong</u>	FRAMEWORKS AND COMPONENTS Chair: R. Armstrong
11:00	11:30	<i>Distributed Components for Integrating Large-Scale HPC Applications.</i> <u>Nanbor Wang</u> and Johan Carlsson	
11:30	12:00	<i>A Proteus-Mediated Communications Substrate for LegionCCA and XCAT-C++.</i> Deger Cenk Erdil, Kenneth Chiu, <u>Madhusudhan Govindaraju</u> , and Michael J. Lewis	
12:00	13:00	<b>Panel IV:</b> Given that it is ubiquitous in the enterprise, do component-based applications make sense for HPC? If so, what changes in their advocacy, funding and development will have to occur to make it a reality, and how likely is this to happen?	
13:00	14:00	LUNCH	
14:00	14:30	<i>SPARSKIT CCA Component.</i> <u>Jason Jones</u> and Masha Sosonkina	TOOLS, FRAMEWORKS AND COMPONENTS Chair: T. Drummond
14:30	15:00	<i>Performance Modeling of Component Assemblies with TAU.</i> <u>Trebon, A. Morris</u> , J. Ray , S. Shende, and A. Malony	
15:00	15:30	<i>Port Monitor: A Monitoring &amp; Debugging Approach for Component Frameworks.</i> <u>Torsten Wilde</u> and James A. Kohl	
15:30	16:30	<b>Panel V:</b> What tools are needed to lower the barriers to framework and component adoption?	
16:30	17:00	Closing Discussion and Remarks	
17:00		Workshop Adjourns	