

Fifth Latin-American SCAT Workshop and Satellite School
July 20-24 2009

“High performance computing trends for 2010 and beyond”



UNIVERSIDAD TECNICA
FEDERICO SANTA MARIA

Host Institution : **Dept. of Informatics:** <http://portal.inf.utfsm.cl/>

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Programme of Activities

Monday July 20th		Topic	Welcome, Workshop and Satellite School	
		Location	Salón de honor, Edificio A	
09h40-10h00	Orellana, Oscar, Dr.	USM Chile	Welcome to all attendants and introduction	
10h00-10h20	Salinas, Luis, Dr.	USM Chile	SCAT impacts and contributions so far	
10h20-11h00	Rosales, Carlos, Dr.	USM Chile	Synthetic Turbulence via the Minimal Multiscale Lagrangian Map Approach	
11h00-11h20	Coffee Break			
11h20-12h00	Moulinec, Charles, Dr.	Daresbury STFC - UK	Smoothed particle hydrodynamics	
12h00-12h40	Orellana, Oscar, Dr.	USM Chile	TBD	
12h40-13h40	Lunch			
13h40-14h20	Barba, Lorena, Dr.	Bristol - UK	Parallel and meshfree: new frontiers of CFD	
14h20-15h00	Zaleski, Stéphane, Prof.	Dalembert, Paris - FR	Part 1: Volume of Fluid and Lattice Gas Cellular Automata for two-phase flow	
15h00-15h20	Coffee Break			
15h20-16h00	Zaleski, Stéphane, Prof.	Dalembert, Paris - FR	Part 2: Volume of Fluid and Lattice Gas Cellular Automata for two-phase flow	
16h00-16h40	Sunderland, Andrew, Dr.	Daresbury STFC - UK	Part 1: Concepts in Parallel Computing	

Tuesday July 21th

		Topic	Satellite School
		Location	Salón de honor, Edificio A
09h40-10h20	Sunderland, Andrew, Dr.	Daresbury STFC - UK	Part 2: Concepts in Parallel Computing
10h20-11h00	Zaleski, Stéphane, Prof.	Dalembert, Paris - FR	Part 3: Volume of Fluid and Lattice Gas Cellular Automata for two-phase flow
11h00-11h20	Coffee Break		
11h20-12h00	Zaleski, Stéphane, Prof.	Dalembert, Paris - FR	Part 4: Volume of Fluid and Lattice Gas Cellular Automata for two-phase flow
12h00-12h40	Soria, Manel, Dr.	CTTC UPC - ES	Part 1: Simulación numérica de la turbulencia con ordenadores paralelos. Aplicaciones al sector de la energía renovable
12h40-13h40	Lunch		
		Topic	Satellite School
		Location	Aula Tecnológica, Laboratorio Informática
13h40-14h20	Soria, Manel, Dr.	CTTC UPC - ES	Part 2: Simulación numérica de la turbulencia con ordenadores paralelos. Aplicaciones al sector de la energía renovable
14h20-15h00	Sunderland, Andrew, Dr.	Daresbury STFC - UK	Part 3: MPI - Introduction
15h00-15h20	Coffee Break		
15h20-16h00	Sunderland, Andrew, Dr.	Daresbury STFC - UK	Part 4: MPI – Practical session
16h00-16h40	Soria, Manel, Dr.	CTTC UPC - ES	Part 3: Simulación numérica de la turbulencia con ordenadores paralelos. Aplicaciones al sector de la energía renovable
16h40-17h20	Rivas, Manuel, Mr.	ADEXUS Chile	Presentation from our sponsor
20h30	SCAT Dinner		

Wednesday July 22nd

		Topic	SCAT management
		Location	Salón de honor, Edificio A
10h00-11h20	SCAT outcomes and evaluations		
11h20-11h40	Coffee Break		
11h40-12h30	SCAT outcomes and evaluations		
12h30-14h00	Lunch		
14h00-18h00	Outdoor activity	Visit to the Casablanca Valley Vinerias	

Thursday July 23rd

		Topic	Workshop and Satellite School	
		Location	Salón de honor, Edificio A	
09h40-10h20	Emerson, David, Prof. X. Gu, Dr.	Daresbury STFC - UK	Part 1: New approaches to modelling nonequilibrium gas flow - <i>Introduction</i>	
10h20-11h00	Chavez, Mario, Dr.	UNAM - MX	HPC 3D Earthquake Propagation Modelling: Experiments and Results	
11h00-11h20	Coffee Break			
11h20-12h00	Emerson, David, Prof. X. Gu, Dr.	Daresbury STFC - UK	Part 2: New approaches to modelling nonequilibrium gas flow - <i>Extended Models</i>	
12h00-12h40	Frelat, Joel, Dr.	Dalembert, Paris - FR	Non linear vibrations of structures under pre-stresses	
12h40-13h40	Lunch			
		Topic	Satellite School	
		Location	Aula Tecnológica, Laboratorio Informática	
13h40-14h20	Cruz, Felipe, Mr.	Bristol- UK	Part 1: hybrid CPU/GPU computing with NVIDIA CUDA - <i>Theoretical approach</i>	
14h20-15h00	idem		Idem	
15h00-15h20	Coffee Break			
15h20-16h00	Emerson, David, Prof. X. Gu, Dr.	Daresbury STFC - UK	Part 3: New approaches to modelling nonequilibrium gas flow - <i>Advanced Methods</i>	
16h00-16h40	Cruz, Felipe, Mr.	Bristol- UK	Part 2: hybrid CPU/GPU computing with NVIDIA CUDA - <i>Session with Cluster access</i>	
16h40-17h30	idem		Idem	

Friday July 24th

		Topic	Workshop and Satellite School	
		Location	Aula Tecnológica, Laboratorio Informática	
09h40-10h20	Pezoa, Raquel, Miss	USM Chile	The ATLAS Grid and AGIS	
10h20-11h00	Fuentes, Andres, Dr.	IUSTI - France	Fire forest on a fractal landscape	
11h00-11h20	Coffee Break			
11h20-12h00	Cruz, Felipe, Mr.	Bristol- UK	Part 3: hybrid CPU/GPU computing with NVIDIA CUDA - <i>Session with Cluster access</i>	
12h00-12h40	idem		Idem	
12h40-13h40	Lunch			
13h40-14h20	TBA	USM Chile	TBA	
14h20-15h00	TBA	USM Chile	TBA	
15h00-15h20	Coffee Break			

Closure of meeting