

Hot Topics in High Performance and Scientific Computing

(SC-CAMP2014)



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About Us...

Inspired by this idea **SC-Camp** is an initiative of **researchers** to offer to **students** state-of-the-art lectures and programming practical sessions upon **HPC** and Distributed Systems topics. SC-Camp is a non-profit event, even located in the middle of the nature.

Speakers / International Committee

- Yiannis Georgiou, Bull, France (Founder)
- Pedro Velho, UFRGS, Brazil (Founder, Chair)
- Carlos Jaime Barrios Hernández, SC₃UIS, Bucaramanga, Colombia (Founder, Chair)
- Robinson Rivas, Universidad Central de Venezuela, Venezuela (Founder)
- Gilberto Díaz, SC₃UIS, Colombia (Founder, Chair)
- Joseph Emeras, LUT, Luxembourg
- Phillip Krikava, INRIA Lille, France
- Moreno Balisevic, ICTP Trieste, Italy
- Monica Hernandez, SC₃UIS, Colombia
- Alvaro de la Ossa, CENAT, Costa Rica
- Carlos Varela, RPI, Estados Unidos
- Luis Núñez, UIS, Colombia

2014 Speakers and Instructors

- Pedro Velho, UFRGS, Brazil (Founder, Chair)
- Carlos J. Barrios H., SC₃UIS, Bucaramanga, Colombia, (Founder, Chair)
- Robinson Rivas, Universidad Central de Venezuela, Venezuela (Founder)
- Gilberto Díaz, SC₃UIS, Colombia (Founder, Chair)
- Luis Alejandro Torres, SC₃UIS, Colombia
- William Trigos, SC₃UIS, Colombia
- Leonardo Camargo, BIOS, Colombia
- ... and others!!!

Steering Committee

- Filip Krikava, INRIA Lille, France
- Josep Emeras, LUG, Luxembourg
- Steffano Cozzini, CNR-IOM
DEMOCRITOS, Moreno Baricevic, CNR-IOM
DEMOCRITOS, Italy
- Brigitte Plateau, Université de Grenoble, France
- Carlos Varela RPI- World CL, USA
- Derrick Kondo, TeraData, USA
- Luis Nuñez, UIS, Colombia
- Michel Riveill, Université de Nice - Sophia
Antipolis, France
- Philippe O. A. Navaux, UFRGS, Brazil

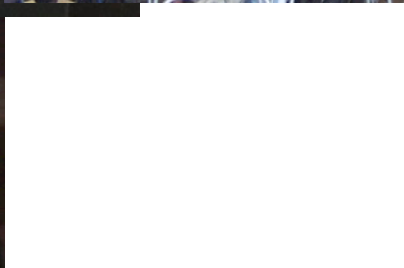
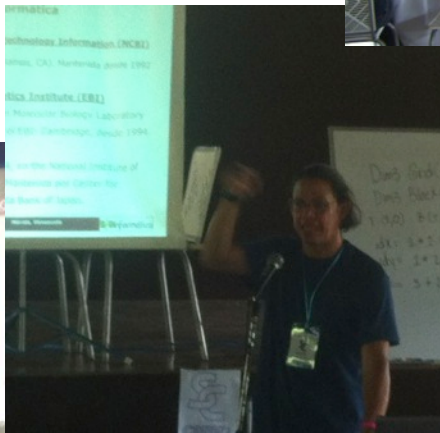
In SC-Camp 2010



In Turrialba's SC-Camp 2011



... In SC-CAMP 2012

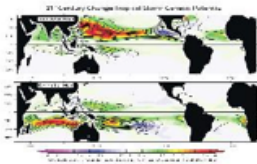
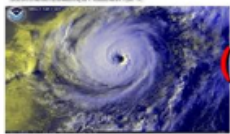


And in Colima, 2013



Application Development Process

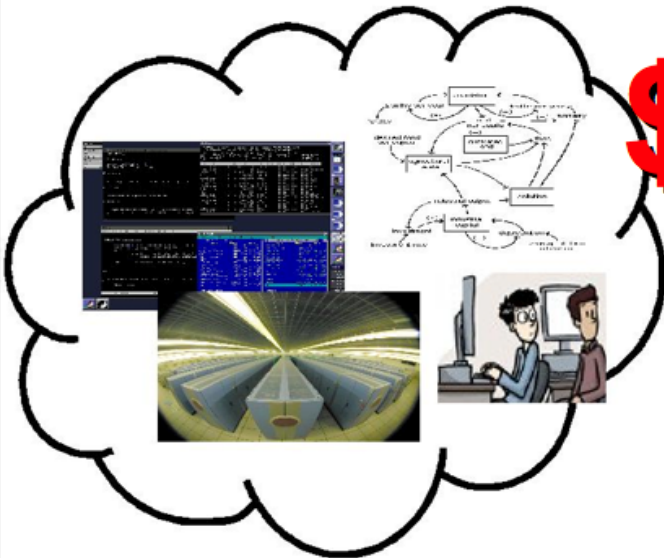
Problem
(Real phenomena)



Development Process



Treatment
(Computer Facility/Solution)

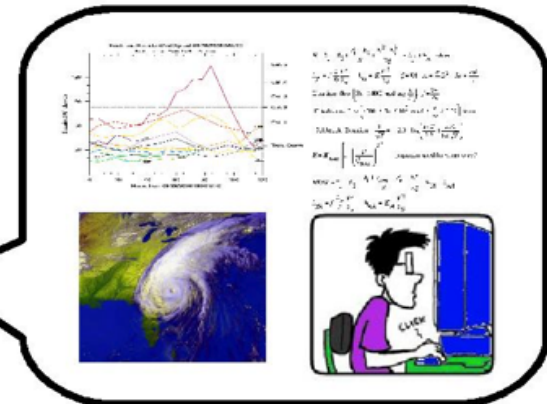


\$ €



Engineer or
Computer Scientist

Scientist



Why Super, Distributed and Scalable Computing?

- Supercomputing is a Tendency
 - Technological and Scientific Independence
 - Perform Better Solutions in Expensive Platforms
 - Best Performance at Low Cost
- Distributed and Scalable Computing Changes the World
 - Collaborative Interaction
 - Multidisciplinary Networking
 - Fast Results to Fundamental Problems (i.e. Higgs Bosson)

Programming Tendencies

- How exploit better infrastructure?
 - Low cost
 - Easy to programming
- How exploit better minds?
 - Easy to design
 - Easy to “traduce” models to programs

Users Need Freedom!!!

- **Physicist likes to be Physicist...
Biologist Likes to be Biologist....**
 - However we need a common language and understanding.
- **Parallel Computing is for real complex problems**
 - Industry, Science and Society need Supercomputing.



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Gracias and Welcome SC-CAMP'14
in Manizales!!

