Introducing Supercomputing and Distributed Systems Camping School 2011

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www.sc-camp.org

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People, Platforms and Applications

SC-Camp is an **initiative** of **researchers** to offer to undergraduate and master **students** a state-of-the-art knowledge upon **High Performance** and **Distributed Computing** topics.

SC-CAMP since 2010 (First SC-CAMP was in Piedecuesta, Colombia)

Goals

- Discuss about the resources and services in scalable architectures. (Mainly in the HPC context)
- Acquire a first experience in scheduling, deployment, monitoring and use of distributed resources and services. (Within a Grid Computing Infrastructure)
- Know the world context and hot topics.
- Acquire Technical Skills to build a Technical Team
- Acquire “real expertise” in development applications.
- Enjoy a natural environment

Motivations

- HPC resources should be used « correctly ».
- Computer Science Engineers should be support e-Science activities.
- Knowing different tools and methodologies allows:
  - Use
  - Understand
  - Propose
  - Development

SC-CAMP'11 Turrialba Topics

- Large Scale Architectures
  - HPC
  - Grid (Welcome to G5K)
- Parallel Programming
  - Message Passing and Massive Parallel Machines
    - MPI, OpenMP, CUDA
  - Large Scale and Distributed Programming
    - Phyton
  - Hot Topics
    - Green Computing
    - Bioinformatics and Environment context..
  - And more!!

Speakers, Lectors, Instructors and Tutors

Gilberto Diaz (Cluster Computing, Grid Computing, HPC)

CeCalcULA, Universidad de Los Andes, Venezuela
Associate Professor ULA, Venezuela
International Instructor in HPC and Scientific Computing

Robinson Rivas (Cluster Computing, Grid Computing, HPC)

Universidad Central de Venezuela
Associate Professor UCV Venezuela
Instructor and organizer of contests in HPC and Scientific Computing

Filip Krikava (Scientific Computing, HPC, Grid Computing, Distributed Systems)

Université de Nice-Sophia Antipolis, France
Laboratoire I3S, Equipe Rainbow
PhD. Student

Speakers, Lectors, Instructors and Tutors

Joseph Emeras (Grid Computing, HPC Computing)

Université de Grenoble, France
Laboratoire d'Informatique de Grenoble, LIG
PhD. Student

Moreno Baricevic (HPC Development and System Administration)

ICT-Democritos, Italy
R & D Specialist - Instructor
HPC-Systems Administrator

Speakers, Lectors, Instructors and Tutors

Yiannis Georgieu (HPC, Grid Computing, Green Computing)
BULL Corp. France
R & D Specialist

Pedro Velho (Grid Computing, HPC)
INRIA RHÔNE-ALPES. France
LIG Laboratory, France

Carlos Jaime Barrios Hernandez (Scalable Systems, HPC, Scientific Computing, Green Computing)
UIS, Colombia
Researcher and Team Responsible

SC-CAMP'11 Days

- Sunday:
  - Presentation Day: Welcome and First Approach to HPC and Large Scale Architectures
- Monday:
  - HPC Day: Installing and Use HPC Platforms
- Tuesday:
  - Grid And Virtualization Day: Enjoying Grid'5000
- Wednesday:
  - Free Day: Knowing Costa Rica
- Thursday:
  - HPC Boot Day: Practical Session in Distributed and Parallel Computing (MPI, Condor)
- Friday:
  - Challenge Day: Practical Session in OpenMP and Contest
- Saturday:
  - Hot Topics Day: Towards in HPC and Large Scale Distributed Computing

Special Thanks

- Alvaro de la Ossa, PhD. (Universidad de Costa Rica)
- Viviana (Universidad de Costa Rica)
- Luis Florez (Universidad de Costa Rica)
- Luis Alberto Núñez de Villavicencio (Red CLARA)
- … and you for your participation!!

Special Thanks

- Universidad de Costa Rica
- Sede Atlantico
- Red CONARE
- MICIT
- CeNAT
- CONICIT
- Microsoft
- Grid 5000-Aladdin Consortium

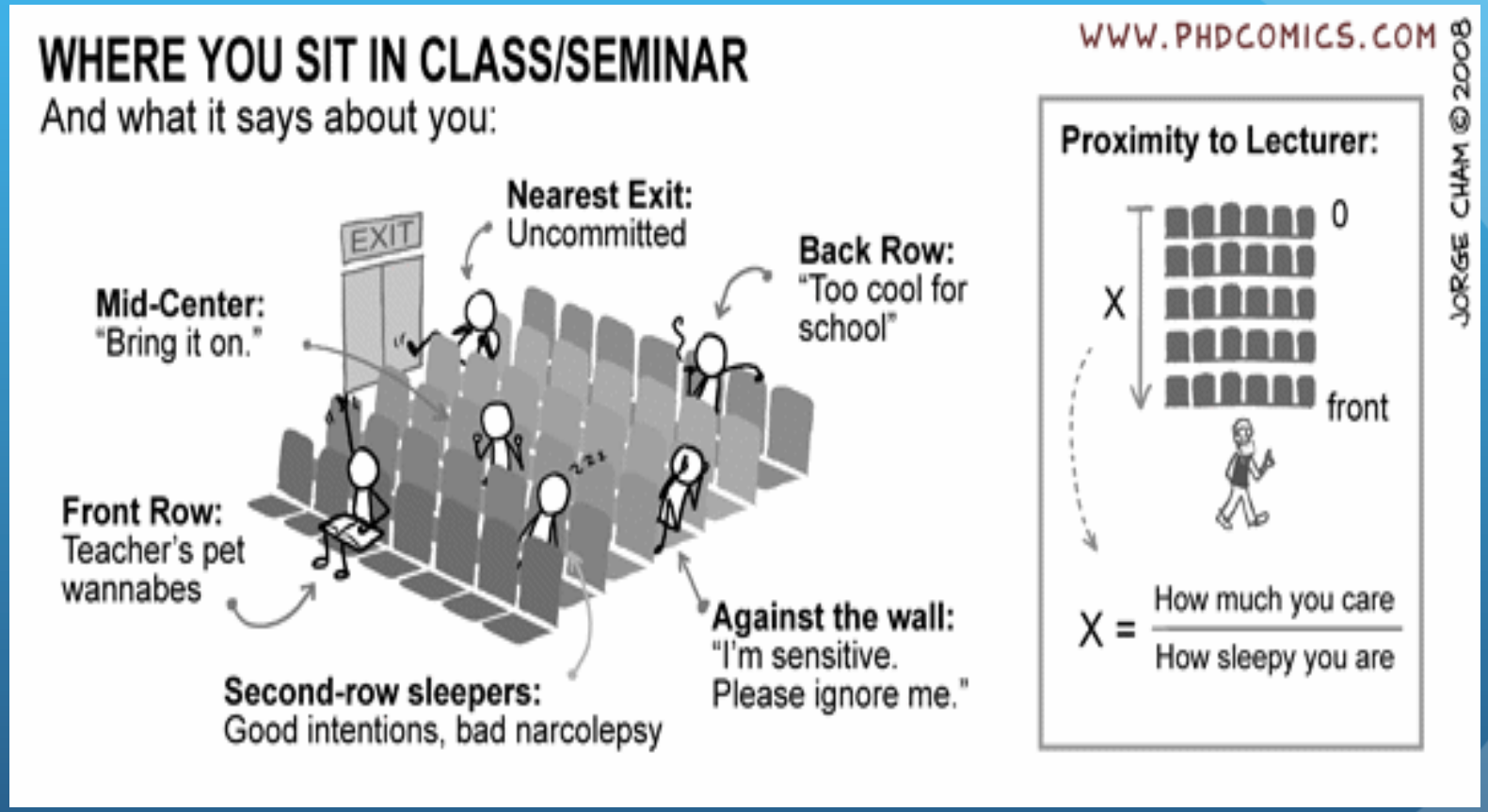
Special Thanks

- Laboratoire d'Informatique de Grenoble (LIG)
- Democritos-ITCP
- Laboratoire d'Informatique, Systèmes et Signauxs de Sophia Antipolis (I3S), Université de Nice-Sophia Antipolis, (I3S-UNSA)
- Universidad de Los Andes, Mérida (ULA)
- Universidad Industrial de Santander (UIS)
- Universidad Central de Venezuela
- Consorcio Latinoamericano de Redes Avanzadas (RedCLARA)
- Centro Nacional de Calculo Cientifico (CeCalcULA)

Recommendations

- Ask ALL questions
- See the site www.sc-camp.org to confirm information and hours, regularly
- Breakfast 8:00, lunch break 13:00 and Dinner 19:00
- Enjoy the SC-CAMP
- … and attention to the snakes!!

Questions or Suggestions?



Enjoy Turrialba's SC-CAMP!!