

SUMMER SCHOOLS 2015

Scientific Committee: D. VERWAERDE (CEA), B. SALHA (EDF), M. COSNARD (INRIA)

COMPUTER SCIENCE

June 15 to June 19, 2015

**SCIENTIFIC COMPUTING
WITH MODERN C++**

EFFECTIVE COMPUTING IN C++
RENAISSANCE ERA
Gabriel DOS REIS (Microsoft)

C++14: A Tour of C++

*Transferring Data Efficiently:
Move Semantics; What You Should Know*

Programming with Templates

Generic Programming: Constraints and More

*Componentization and Composition:
Looking Ahead*

CONCURRENT PROGRAMMING
IN MODERN C++
Artur LAKSBERG (Microsoft)

Decomposing Problem for Parallelism

Atomics and Lock Free Programming

Data Parallelism and GPU Programming

Concurrency Patterns in C++ 14

What to Expect in C++ 17

NUMERICAL ANALYSIS

June 22 to June 26, 2015

LATTICE BOLTZMANN SCHEMES

François DUBOIS - Loïc GOUARIN -
Benjamin GRAILLE
(Univ. Paris-Sud)

Thermal Problems

Incompressible Fluids

Boundary Conditions

Stability

Compressible Fluids

– Hands on session –

– Seminars: various conferences by international specialists –

Coordinator of the Computer Science Summer School

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Coordinator of the Numerical analysis Summer School

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Registration Deadline: May 22, 2015

Summer schools are intended for researchers, engineers and PhD students.

They allow them to review the state of progress of the proposed subjects and to confront their experience.
The teaching is done in English. It is complemented by practical works, in small groups, hosted by assistants.

Both schools will take place in the castle of Cadarache - 13115 Saint Paul Lez Durance - FRANCE

Cost of the registration (accommodation and all expenses included),

Computer Science school (5 days) / Numerical Analysis school (5 days) :

Full rate: € 2800 - Universities and public research institutes: € 1600 - PhD students: € 900