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**The Fourth International Conference on Computational Logics,
Algebras, Programming, Tools, and Benchmarking
COMPUTATION TOOLS 2013**

May 27 - June 1, 2013 - Valencia, Spain

<http://www.aria.org/conferences13/COMPUTATIONTOOLS13.html>

Important deadlines:

Submission (full paper)	December 30, 2012
Notification	February 19, 2013
Registration	March 1, 2013
Camera ready	March 1, 2013

Tracks:

Logics

Reasoning logics; Fuzzy logics; Semantic logics; Temporal logics; Emotion logics; Ambient logics; Modal logics; Description logics; Computational tree logic; Computational logics and constraints; Quantum computational logics; Executable computational logics; Monadic computational logics; Many-valued computational logics; Computability logic

Algebras

Computational algebras; K-theories, C*-algebras, Index theory; Algebraic and topological K-theory; Geometric group theory and group C*-algebras; Noncommutative geometry and topology; Pseudodifferential operators on singular manifolds; Topological invariants of non-simply connected manifolds; Deformation quantization; Lambda calculus; Relation algebra; Algebras for symbolic computation; Constructive algebras

Advanced computation techniques

Machine learning; Fuzzy theory/computation/logic; (Artificial) neuronal networks; Distributed artificial intelligence; Genetic algorithms; Analytic tableaux; Autonomous agent-based techniques; Knowledge-based systems and automated reasoning; Logical issues in knowledge representation /non-monotonic reasoning/belief; Dempster-Shafer theory; Concurrent computation and planning; Deduction and reasoning

Specialized programming languages

Logic programming; Specialized computation languages; Real-time computation languages; Embedded-computing languages; Programming semantics; Content-driven programming; Multimedia-oriented programming; Context-driven programming; Service-oriented programming; Pattern-oriented programming; Regenerative programming; Progressive programming; Sensing-oriented programming; Mobile-ubiquity-oriented computing; Compilation issues

Tools for distributed computation

Platforms for distributed computing; Specification and verification of programs and systems; Techniques for cloud computing; On-request resource allocation mechanisms; Security and privacy techniques; Computational benchmarking metrics, criteria and methodologies; Distributed debug and on-fly repairing; Inference of schemas, integrity constraints in computational applications; Real-world applications, experiments, projects