



[www.iaia.org](http://www.iaia.org)

**The Third International Conference on Computational Logics,  
Algebras, Programming, Tools, and Benchmarking  
COMPUTATION TOOLS 2012**

**July 22-27, 2012 - Nice, France**

<http://www.iaia.org/conferences12/COMPUTATIONTOOLS12.html>

**Important deadlines:**

Submission (full paper)	March 5, 2012
Notification	April 23, 2012
Registration	May 7, 2012
Camera ready	May 7, 2012

**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