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**The Eighth International Conference on Computational Logics,  
Algebras, Programming, Tools, and Benchmarking  
COMPUTATION TOOLS 2017**

**February 19 - 23, 2017 - Athens, Greece**

<http://www.aria.org/conferences2017/COMPUTATIONTOOLS17.html>

**Important deadlines:**

Submission (full paper)	October 1, 2016
Notification	December 1, 2016
Registration	December 15, 2016
Camera ready	January 15, 2017

**Tracks:**

**Trends on computation**

Assertion-based analysis; Conditional transformation systems; Generalized learned constraints; Constraint propagation; Stable-unstable semantics; Abstract compilation; Semantic code browsing; Pointer analysis; Minimal entailment; Infinitary formulas; Static profiling of parametric resource usage; Rewriting optimization statements; Algebraic effect handlers; Non-ground rules; Resource-based answer set semantics; Local domain symmetry; Knowledge patterns; Knowledge representation; Grounded fixpoints; Supersafe rules; Qualitative spatio-temporal reasoning; Reasoning about truthfulness; Cause-effect relations; Higher-order logics; Models expansion; Optimal stable models; Intelligent instantiations; Answer set programming; Non-monotonic cause-effect relations; Paraconsistency; Active integrity constraints

**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