

Joint 25th RTA & 12th TLCA: CALL FOR PAPERS

Joint 25th International Conference on
REWRITING TECHNIQUES AND APPLICATIONS
and 12th International Conference on
TYPED LAMBDA CALCULI AND APPLICATIONS

July 14–17, 2014, Vienna, Austria
as part of The Sixth Federated Logic Conference (FLoC 2014)
as part of The Vienna Summer of Logic (VSL 2014)

<http://vs12014.at/rta-tlca>

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Topics

This joint RTA and TLCA conference is the major forum for the presentation of research on all aspects of rewriting and typed lambda-calculi. Areas of interest include *but are not limited to*:

Foundations: string rewriting; term rewriting; graph rewriting; lambda-calculi; higher-order rewriting; binding techniques; constrained rewriting and deduction; categorical and infinitary rewriting; stochastic rewriting; net rewriting; Petri nets; higher-dimensional rewriting; process calculi; explicit substitution; tree automata; confluence; termination; complexity; modularity.

Algorithmic aspects and implementation: strategies; matching; unification; anti-unification; narrowing; constraint solving; theorem proving; completion techniques; implementation techniques; parallel execution; certification of rewriting properties; abstract machines; automated (non)termination and confluence provers; automated complexity analysis; SMT solving; system descriptions.

Logic: proof theory; natural deduction; sequent calculi; proof assistants; cut elimination and normalization; propositions as types; linear logic and proof nets; equational logic; rewriting logic; rewriting calculi; proof checking; reasoning about programming languages and logics; homotopy type theory; type-theoretic aspects of complexity; implicit computational complexity.

Types: dependent types; polymorphism; intersection types and related approaches; subtyping; type inference and type checking; types in databases.

Semantics: denotational semantics; operational semantics; game semantics; realisability; domain theory; categorical models; universal algebra.

Programming: foundational aspects of functional programming, object-oriented programming, and other programming paradigms; flow analysis of higher-type computation; program equivalence; program transformation; program optimization; program refactoring; rewriting models of programs; rule-based (functional and logic) programming; control operators; symbolic and algebraic computation; system synthesis and verification; XML queries and transformations; types in program analysis and verification; analysis of cryptographic protocols; systems biology; linguistics.

Important Dates

abstract submission:	Jan. 28, 2014 (ext. Feb 4th)	notification:	Apr. 9, 2014
paper submission:	Feb. 4, 2014 (ext. Feb 11th)	final version:	Apr. 29, 2014
rebuttal period:	Mar. 19–21, 2014		

Submission and publication

Submissions presenting original work are expected at

<https://www.easychair.org/conferences/?conf=rtatlca2014>.

They should be at most 15 pages (10 for system descriptions) and follow

<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>.

The proceedings will be published in the *LNCS Advanced Research in Computing and Software Science* series of Springer. One author of each accepted paper is expected to present it at the conference.