Publications

Asynchronous Modal FRP

Calculating Compilers for Concurrency

Modal FRP for all: Functional reactive programming without space leaks in Haskell

Monadic Compiler Calculation (Functional Pearl)

Diamonds are not forever: Liveness in reactive programming with guarded recursion

Calculating Correct Compilers II: Return of the Register Machines

Simply RaTT: A Fitch-style Modal Calculus for Reactive Programming

Convergence in infinitary term graph rewriting systems is simple

Strict Ideal Completions of the Lambda Calculus

What makes guarded types tick?

Compiling a 50-year journey

Böhm Reduction in Infinitary Term Graph Rewriting Systems
The Clocks Are Ticking: No More Delays! Reduction Semantics for Type Theory with Guarded Recursion

Generalising tree traversals and tree transformations to DAGs: Exploiting sharing without the pain

Cutting Out Continuations

Calculating correct compilers
Bahr, P. & Hutton, G., 1 Sept 2015, In: Journal of Functional Programming. 25

Certified Symbolic Management of Financial Multi-party Contracts

Type Families with Class, Type Classes with Family

Calculating Certified Compilers for Non-deterministic Languages

Generalising Tree Traversals to DAGs: Exploiting Sharing without the Pain

Domain-Specific Languages for Enterprise Systems

Towards Certified Management of Financial Contracts

Composing and Decomposing Data Types: A Closed Type Families Implementation of Data Types à La Carte

Pick’n’Fix: Capturing Control Flow in Modular Compilers

Partial Order Infinitary Term Rewriting
Bahr, P., 1 Jun 2014, In: Logical Methods in Computer Science. 10, 2

Proving Correctness of Compilers Using Structured Graphe
Programming macro tree transducers

Convergence in Infinitary Term Graph Rewriting Systems is Simple (Extended Abstract)

Modes of Convergence for Term Graph Rewriting
Bahr, P., 1 Jun 2012, In: Logical Methods in Computer Science. 8, 2

Modular Tree Automata

Infinitary Term Graph Rewriting is Simple, Sound and Complete

Parametric Compositional Data Types

A Functional Language for Specifying Business Reports

Evaluation à la Carte: Non-Strict Evaluation via Compositional Data Types

Compositional data types

Modes of Convergence for Term Graph Rewriting

Compositional Data Types - A Report from the Field

Abstract Models of Transfinite Reductions

Partial Order Infinitary Term Rewriting and Böhm Trees

Infinitary Rewriting - Theory and Applications
Bahr, P., 1 Sept 2009, Vienna.