

## Publications

Many of my are available at <http://www.inria.fr/oasis/Ludovic.Henrio>.

In almost all my papers, authors are either ordered alphabetically, or alphabetically by institution.

### ► Book and Book Chapters:

- [1] Françoise Baude, Denis Caromel, Ludovic Henrio, and Paul Naoumenko. *A Flexible Model And Implementation Of Component Controllers*. Coregrid. Springer, 2008.
- [2] Antonio Cansado, Denis Caromel, Ludovic Henrio, Eric Madelaine, Marcela Rivera, and Emil Salageanu. *The Common Component Modeling Example: Comparing Software Component Models*, volume 5153 of *Lecture Notes in Computer Science*, chapter A Specification Language for Distributed Components implemented in GCM/ProActive. Springer, 2008. <http://agrausch.informatik.uni-kl.de/CoCoME>.
- [3] Denis Caromel and Ludovic Henrio. *A Theory of Distributed Object*. Springer-Verlag. Approximately 370 pages, to appear in March 2005.
- [4] Maciek Malawski, Tomasz Gubala, Marek Kasztelnik, Tomasz Bartynski, Marian Bubak, Françoise Baude, and Ludovic Henrio. *High-Level Scripting Approach For Building Component-Based Applications On The Grid*, pages 307–320. Coregrid. Springer, 2008.

### ► Journals:

- [5] Isabelle Attali, Denis Caromel, Carine Courbis, Ludovic Henrio, and Henrik Nilsson. An integrated development environment for Java Card. *Computer Networks*, 2001. Journal version of [10].
- [6] Tomàs Barros, Rabéa Boulifa, Antonio Cansado, Ludovic Henrio, and Eric Madelaine. Behavioural models for distributed Fractal components. *Annals of Telecommunications*, accepted for publication, 2008. also Research Report INRIA RR-6491.
- [7] Françoise Baude, Denis Caromel, Cédric Dalmaso, Marco Danelutto, Vladimir Getov, Ludovic Henrio, and Christian Pérez. Gcm: A grid extension to fractal for autonomous distributed components. *Annals of Telecommunications*, accepted for publication, 2008.
- [8] Françoise Baude, Denis Caromel, Christian Delbé, and Ludovic Henrio. Un protocole de tolérance aux pannes pour objets actifs non préemptifs. *Technique et Science Informatiques*, 2006.
- [9] Denis Caromel, Ludovic Henrio, and Bernard Paul Serpette. Asynchronous sequential processes. *Information and Computation*, In Press, Accepted Manuscript, 2008.

► **Conferences and Workshops:**

- [10] Isabelle Attali, Denis Caromel, Carine Courbis, Ludovic Henrio, and Henrik Nilsson. Smart Tools for Java Cards. In Josep Domingo-Ferrer, David Chan, and Anthony Watson, editors, *Smart Card Research and Advanced Applications*. Kluwer Academic Publishers, September 2000. Proceedings of the IFIP Fourth Working Conference on Smart Card Research and Advanced Applications (CARDIS 2000), HP Labs, Bristol, UK.
- [11] Isabelle Attali, Denis Caromel, Ludovic Henrio, and Felipe Luna Del Aguila. Secured information flow for asynchronous sequential processes. In *3rd International Workshop on Security Issues in Concurrency (SecCo'05)*, Electronic Notes in Theoretical Computer Science, San Francisco, USA, August 2005. Elsevier.
- [12] Laurent Baduel, Françoise Baude, Denis Caromel, Ludovic Henrio, Fabrice Huet, Stéphane Lanteri, and Matthieu Morel. Grid components techniques: Composing, gathering, and scattering. In *Coupled Problems 2005, Computational Methods for Coupled Problems in Science and Engineering, an ECCOMAS Thematic Conference*, Santorini, Greece, may 2005.
- [13] Tomás Barros, Ludovic Henrio, and Eric Madelaine. Behavioural models for hierarchical components. In *Proceedings of SPIN'05*. Springer Verlag, 2005.
- [14] Tomás Barros, Ludovic Henrio, and Eric Madelaine. Verification of distributed hierarchical components. In *International Workshop on Formal Aspects of Component Software (FACS'05)*, Macao, October 2005. Electronic Notes in Theoretical Computer Science (ENTCS).
- [15] Alessandro Basso, Alexander Bolotov, Artie Basukoski, Vladimir Getov, Ludovic Henrio, and Mariusz Urbanski. Specification and verification of reconfiguration protocols in grid component systems. In *Proceedings of the 3rd IEEE Conference On Intelligent Systems IS-2006*, 2006. long version published as a CoreGRID Technical Report, TR-0042.
- [16] Françoise Baude, Denis Caromel, Ludovic Henrio, and Matthieu Morel. Collective interfaces for distributed components. In *CCGrid 2007: IEEE International Symposium on Cluster Computing and the Grid*, May 2007.
- [17] Françoise Baude, Ludovic Henrio, and Paul Naoumenko. Structural reconfiguration : an autonomic strategy for gcm components. In *Proceedings of The Fifth International Conference on Autonomic and Autonomous Systems: ICAS 2009*, 2009. To appear.
- [18] Françoise Baude, Denis Caromel, Christian Delbé, and Ludovic Henrio. A Hybrid Message Logging-CIC Protocol for Constrained Checkpointability. In *Proc. of the 11th International Euro-Par Conference*, volume 3648 of *LNCS*. Springer-Verlag, 2005.
- [19] Françoise Baude, Denis Caromel, Christian Delbé, and Ludovic Henrio. Promised messages: Recovering from inconsistent global states. In *ACM SIGOPS conference Principles and Practice of Parallel Programming (PPoPP). Poster.*, 2007.
- [20] Françoise Baude, Ludovic Henrio, and Paul Naoumenko. A Component Platform for Experimenting with Autonomic Composition. In *First International Conference on Autonomic Computing and Communication Systems (Autonomics 2007). Invited Paper*. ACM Digital Library, Oct 2007.

- [21] S. Bezinne, V. Galtier, S. Vialle, F. Baude, M. Bossy, V. Dung, and L. Henrio. A fault tolerant and multi-paradigm grid architecture for time constrained problems. application to financial option pricing. In *2nd IEEE International Conference on e-Science and Grid Computing*. IEEE, December 2006.
- [22] A. Cansado, L. Henrio, and E. Madelaine. Towards real case component model-checking. In *5th Fractal Workshop*, Nantes, France, July 2006.
- [23] Antonio Cansado, Ludovic Henrio, and Eric Madelaine. Transparent first-class futures and distributed component. In *International Workshop on Formal Aspects of Component Software (FACS'08)*, Malaga, 2008. Electronic Notes in Theoretical Computer Science (ENTCS).
- [24] Antonio Cansado, Ludovic Henrio, and Eric Madelaine. Unifying architectural and behavioural specifications of distributed components. In *International Workshop on Formal Aspects of Component Software (FACS'08)*, Malaga, 2008. Electronic Notes in Theoretical Computer Science (ENTCS).
- [25] Denis Caromel, Guillaume Chazarain, and Ludovic Henrio. Garbage collecting the grid: a complete dgc for activities. In *Proceedings of the 8th ACM/IFIP/USENIX International Middleware Conference*, Newport Beach, CA, November 2007.
- [26] Denis Caromel and Ludovic Henrio. Asynchronous distributed components: Concurrency and determinacy. In *Proceedings of the IFIP International Conference on Theoretical Computer Science 2006 (IFIP TCS'06)*, Santiago, Chile, August 2006. Springer Science. 19th IFIP World Computer Congress.
- [27] Denis Caromel, Ludovic Henrio, and Mario Leyton. Type safe algorithmic skeletons. In *Proceedings of the 16th Euromicro International Conference on Parallel, Distributed and network-based Processing*, Toulouse, France, February 2008.
- [28] Denis Caromel, Ludovic Henrio, and Eric Madelaine. Active objects and distributed components: Theory and implementation. In Frank de Boer and Marcello Bonsangue, editors, *FMCO 2007*, number 5382 in LNCS, pages 179–199, Berlin Heidelberg, 2008. Springer-Verlag.
- [29] Denis Caromel, Ludovic Henrio, and Bernard Serpette. Context inference for static analysis of java card object sharing. In *Proceedings e-Smart 2001*. Springer-Verlag, 2001.
- [30] Denis Caromel, Ludovic Henrio, and Bernard Paul Serpette. Asynchronous and deterministic objects. In *Proceedings of the 31st ACM SIGACT-SIGPLAN symposium on Principles of programming languages (POPL)*, pages 123–134. ACM Press, 2004.
- [31] Ludovic Henrio and Florian Kammüller. A mechanized model of the theory of objects. In *9th IFIP International Conference on Formal Methods for Open Object-Based Distributed Systems (FMOODS)*, LNCS. Springer, June 2007.
- [32] Ludovic Henrio and Marcela Rivera. Stopping safely hierarchical distributed components: application to gcm. In *CBHPC '08: Proceedings of the 2008 compFrame/HPC-GECCO workshop on Component based high performance*, pages 1–11, New York, NY, USA, 2008. ACM.

- [33] Ludovic Henrio and Bernard Paul Serpette. A parameterized polyvariant Byte-Code verifier. In *Actes des journées JFLA*, Chamrousse, France, January 2003.
- [34] Ludovic Henrio, Bernard Paul Serpette, and Szabolcs Szentes. Algorithmes et complexités de la réduction statique minimale. In *Actes des journées JFLA*, Sainte-Marie-de-Ré, France, January 2004.
- [35] Maciej Malawski, Marian Bubak, Francoise Baude, Denis Caromel, Ludovic Henrio, and Matthieu Morel. Interoperability of grid component models: GCM and CCA case study. In Thierry Priol and Marco Vanneschi, editors, *Towards Next Generation Grids: Proceedings of the CoreGRID Symposium*, pages 95–105, Rennes, France, August 2007. Springer.
- [36] Maciej Malawski, Tomasz Gubala, Marek Kasztelnik, Tomasz Bartynski, Marian Bubak, Francoise Baude, and Ludovic Henrio. High-level scripting approach for building component-based applications on the grid. In *CoreGRID Workshop on Grid Programming Model Grid and P2P Systems Architecture Grid Systems, Tools and Environments*, Heraklion, Crete, June 2007. Springer.
- [37] Jeyarajan Thiayalingam, Nikos Parlavantzas, Stavros Isaiadis, Ludovic Henrio, Denis Caromel, and Vladimir Getov. Proposal for a lightweight generic grid platform architecture. In *Proceedings of CompFrame 2006, Component and Framework Technology in High-Performance and Scientific Computing*, Paris, France, June 2006. IEEE.

► **Thesis:**

- [38] Ludovic Henrio. *Calcul d’Objets Asynchrones : Confluence et Déterminisme*. PhD thesis, Université de Nice Sophia-Antipolis, 2003. <http://www-sop.inria.fr/oasis/Ludovic.Henrio/these>.

► **Reports, Deliverables ...**

- [39] Marco Aldinucci, Sonia Campa, Massimo Coppola, Marco Danelutto, G. Zoppi, Alessandro Basso, Alexander Bolotov, Francoise Baude, Hinde Bouziane, Denis Caromel, Ludovic Henrio, Christian Pérez, Jose Cunha, Classen Michael, Philipp Classen, Christian Lengauer, J. Cohen, S. Mc Gough, Natalia Curre-Linde, Patrizio Dazzi, Nicola Tonello, Jan Dünwebber, Sergei Gorlatch, Peter Kilpatrick, Nadia Ranaldo, and Eugenio Zimeo. Proceedings of the programming model institute technical meeting 2008. Technical Report TR-0138, Institute of Programming Model, CoreGRID - Network of Excellence, May 2008.
- [40] Rosa M. Badia, Olav Beckmann, Sofia Panagiotidi, Denis Caromel, Ludovic Henrio, Marian Bubak, Maciek Malawski, Vladimir Getov, Stavros Isaiadis, Jeyarajan Thiayalingam, and Vladimir Lazarov. Lightweight grid platform: Design methodology. Technical report, Institute on Grid Systems, Tools and Environments, Jan 2006. CoreGRID Technical Report, TR-0020.

- [41] T. Barros, L. Henrio, and E. Madelaine. Behavioural models for hierarchical components. Technical Report RR-5591, INRIA, June 2005.
- [42] Alessandro Basso, Alexander Bolotov, Artie Basukoski, Vladimir Getov, Ludovic Henrio, and Mariusz Urbanski. Specification and verification of reconfiguration protocols in grid component systems. Technical report, Institute on Programming Model (WP3), May 2006. CoreGRID Technical Report, TR-0042.
- [43] F. Baude, D. Caromel, L. Henrio, and M. Morel. Collective interfaces for a grid component model, proposed extensions to the fractal component model. Technical report, Internal technical report, CRE France Telecom R&D, Nov 2005.
- [44] F. Baude, V. D. Doan, L. Henrio, P. Naoumenko, and partners VTT, TUB, UBasel, CreateNet, SUN, Nokia of the BIONETS consortium. Specification of service life-cycle. Technical Report D.3.2.1, BIONETS IP Project Deliverable from the Requirement and Analysis workpackage (3.2), Dec. 2006.
- [45] F. Baude, L. Henrio, and partners VTT, TUB, UNIH of the BIONETS consortium. Service architecture requirement specification. Technical Report D.3.1.1, BIONETS IP Project Deliverable from the Requirement and Analysis workpackage (3.1), July 2006.
- [46] Françoise Baude, Denis Caromel, Christian Delbé, and Ludovic Henrio. A fault tolerance protocol for ASP calculus : Design and proof. Research Report, INRIA Sophia Antipolis, June 2004. RR-5246.
- [47] Françoise Baude, Denis Caromel, Ludovic Henrio, Matthieu Morel, and Paul Naoumenko. Fractalising fractal controller for a componentisation of the non-functional aspects. 5th Fractal Workshop in conjunction with ECOOP'20 – poster, July 2006.
- [48] Françoise Baude, Ludovic Henrio, Paul Naoumenko, Daniele Miorandi, Janne Lathi, and Danniël Schreckling. Evaluating the fitness of service compositions. Technical Report D.3.2.5, BIONETS IP Project Deliverable from the Autonomic Service Life-Cycle And Service Ecosystems WP (3.2), December 2008.
- [49] Françoise Baude, Ludovic Henrio, Paul Naoumenko, and Heiko Pfeffer. Graph-Based Service Individual specification: Creation and Representation. Technical report, BIONETS IP Project Deliverable from the Autonomic Service Life-Cycle And Service Ecosystems WP (3.2), Jan, revised June 2008. [http://www.bionets.eu/docs/BIONETS\\_D3\\_2\\_3.pdf](http://www.bionets.eu/docs/BIONETS_D3_2_3.pdf).
- [50] D. Caromel, C. Delbé, and L. Henrio. Promised consistency for rollback recovery. Technical report, Sophia Antipolis, 2006. Technical report n RR-5902.
- [51] Denis Caromel, Christian Delbé, Ludovic Henrio, and Romain Quilici. Brevet "dispositif et procédé asynchrones et automatiques de transmission de résultats entre objets communicants", Nov 2003. le 26 11 2003, No FR 03 138 76.
- [52] Denis Caromel, Ludovic Henrio, and Bernard Serpette. Asynchronous sequential processes. Research Report, INRIA Sophia Antipolis, 2003. RR-4753.

- [53] CoreGRID, Programming Model Institute. Basic features of the grid component model (assessed). Technical report, CoreGRID, Programming Model Virtual Institute, 2006. Deliverable D.PM.04, <http://www.coregrid.net/mambo/images/stories/Deliverables/d.pm.04.pdf>.
- [54] CoreGRID Programming Model Virtual Institute. Programming models for the single gcm component: a survey, Sep. 2006. Deliverable D.PM.06.
- [55] Françoise Baude, Ludovic Henrio and partners TUB, UBASEL, CN, SUN, NOKIA, VTT, TI of the BIONETS consortium. Specification of service evolution. Technical report, BIONETS IP Project Deliverable from the Autonomic Service Life-Cycle And Service Ecosystems WP (3.2), Aug 2007. [http://www.bionets.eu/docs/BIONETS\\_D3\\_2\\_2.pdf](http://www.bionets.eu/docs/BIONETS_D3_2_2.pdf).
- [56] Ludovic Henrio. Rapport de DEA : Analyses de partage pour applications javacard. septembre 2000.
- [57] Ludovic Henrio and Florian Kammüller. A formalization of the theory of objects in Isabelle/HOL. Rapport de recherche, 2006. RR-6079.
- [58] Ludovic Henrio, Florian Kammüller, and Henry Sudhof. Aspfun: A functional and distributed object calculus semantics, type-system, and formalization. Research Report 6353, INRIA, 11 2007.
- [59] Ludovic Henrio and Marcela Rivera. An algorithm for safely stopping a component system. Rapport de recherche, 2008. RR-6444.
- [60] Ludovic Henrio, Bernard Serpette, and Szabolcs Szentes. Implementation and complexity of the lowest static reduction. Research Report, INRIA Sophia Antipolis, 2003. RR-5034.
- [61] J. Lahti, Ludovic Henrio, K. Ville, F. Laura, Daniele Miorandi, David Linner, Heiko Pfeffer, and Françoise Baude. Advanced service life-cycle and integration. Technical Report D.3.2.4, BIONETS IP Project Deliverable from the Autonomic Service Life-Cycle And Service Ecosystems WP (3.2), June 2008.
- [62] David Linner, Heiko Pfeffer, Stephan Steglich, Françoise Baude, Ludovic Henrio, and Paul Naoumenko. Service probes implementation and evaluation. Technical Report D.3.4.1, BIONETS IP Project Deliverable from the Service Probes WP (3.4), June 2008.
- [63] OASIS team and other partners in the CoreGRID Programming Model Virtual Institute. Proposals for a grid component model. Technical Report D.PM.02, CoreGRID, Programming Model Virtual Institute, Feb 2006. Responsible for the deliverable.
- [64] OASIS team and other partners in the CoreGRID Programming Model Virtual Institute. Survey of advanced component programming models. Technical report, Oct. 2006. Deliverable D.PM.05, CoreGRID, Programming Model Institute.
- [65] OASIS team and other partners in the CoreGRID Programming Model Virtual Institute. Innovative features of gcm (with sample case studies): a technical survey. Technical report, Sep. 2007. Deliverable D.PM.07.