

Curriculum Vitae

January 2016

Gilles Muller
Senior Research Scientist
Head of the Whisper team

Inria/LIP6
Boîte courrier 169
4 Place Jussieu
75252 Paris Cedex 05
FRANCE

Tel : +33 1 44 27 88 52
Email: Gilles.Muller@lip6.fr
<http://lip6.fr/Gilles.Muller>

Education

Habilitation à diriger des recherches, October 1997, University of Rennes 1

Title : Contribution to the Design of Adaptive and Extensible Operating Systems:
from Micro-kernel to Partial Evaluation

Jury members : Jean-Pierre Banâtre, Roland Balter, David Powell, Calton Pu,
Michel Banâtre, Charles Consel.

PhD in computer science, June 1988, University of Rennes 1

Title: The Design and Building of a Reliable Multiprocessor Architecture

Jury members: Laurent Kott, Jacques Lenfant, Gérard Roucairol,
Jean-Pierre Verjus, Jean-Pierre Banâtre, Michel Banâtre.

Professional Experience

May 2014 - Head of the WHISPER Inria Paris team.

September 2009 - Senior Research Scientist, INRIA,
member of the REGAL Inria Paris-Rocquencourt team.

March 2002 - August 2009 Professor, Ecole des Mines de Nantes,
member of the OBASCO EMN/INRIA, LINA team.

October 1988 - February 2002 Associate Research Scientist (*Chargé de recherche*), INRIA
1996- February 2002 member of the COMPOSE group (created with Charles Consel).
1988-1996 member of the LSP/SOLIDOR group.

1985-1988: PhD student.

Grants and Contrats

- **CIFRE Thales**, 2016-2018, *Contrôle prédictible et efficace de processeurs multi-coeurs COTS pour des utilisations temps-réel dur*, Co-Principal Investigator. 45 000 euros.
- **DGA**, 2014-2016, *Fast Driver Development*, Co-Principal Investigator. 155 480 euros.
- **CIFRE Renault**, 2012-2014, *Hierarchical scheduling for virtualized embedded systems*, Co-Principal Investigator. 45 000 euros.
- **CIFRE Orange**, 2012-2014, *Software robustness in OSGi*, Co-Principal Investigator. 30 000 euros.
- **ANR INFRA**, 2012-2015, *INFRA-JVM*, Participant. 202 600 euros.
- **ANR non thématique ABL**, 2009-2012, *A Bug's life*, Principal Investigator. 237 800 euros.
- **ANR logicielle SADAJ**, 2006–2009, *Safe And Deterministic Automotive Java on cost effective microcontrollers*, Co-Principal Investigator. 130 000 euros.

- **ANR non thématique FLFS**, 2006–2009, *Family of Languages for Family of Systems*, Participant. 206 000 euros.
- **ARC INRIA VeriTLA+**, 2006–2007, Participant. 47 000 euros global to the project.
- **ANR non thématique Coccinelle**, 2005-2008, *A Language-Based Approach to Managing the Col-lateral Evolution of Linux Device Drivers*, Principal Investigator. 220 000 euros.
- **CIFRE Jaluna**, 2004-2007, *Scheduling and hierarchies of OSes*, Principal Investigator. 36 000 euros.
- **ACI CORSS**, 2003-2006, *Property verification in system software*, Principal Investigator. 21 000 euros.
- **Microsoft**, 2003, *Port of Bossa under XP*, Principal Investigator. Dollar 25 000.
- **Microsoft**, 2003, *Methodologies for OS development*, Principal Investigator. Euros 20 000.
- **Action Spécifique, CNRS**, 2002, *Methodologies and tools for OS development*, Project manager.
- **ITEA European project**, 1999-2001, *ESAPS - Technologie de développement de lignes de produits*, Co-Principal Investigator (with Charles Consel). FF 526 000.
- **ITEA European project**, 1999-2001, *DESS - Méthodologie de développement de logiciels adaptée aux systèmes embarqués*, Co-Principal Investigator (with Charles Consel). FF 530 000.
- **France Télécom/CNET (CTI)**, 1999-2002, *Adaptation de systèmes réflexifs au moyen de langages dédiés*, Principal Investigator. FF 990 000.
- **RNRT**, projet Phénix, 2000-2003, *Noyaux d'infrastructure répartie adaptable*, Principal Investigator. FF 1 089 000.
- **BULL**, 1998-2001, *Optimisation de Java pour les cartes à microprocesseur*, Co-Principal Investigator (with Charles Consel). FF 830 000.
- **Alcatel**, 1997-2000, *Approche déclarative à l'optimisation d'applications de télécommunication - projet Reutel 2000*, Co-Principal Investigator (with Charles Consel). FF 864 000.
- **Thomson Multimédia**, 1999-2000, *Conception d'environnement de programmation pour les lan-gages dédiés au domaine des systèmes embarqués multimédia grand public*, Co-Principal Investigator (with Charles Consel). FF 800 000.
- **Thomson Multimédia**, 1998 (6 month), *Génération automatique de composants logiciels à partir de descriptions de haut niveau*, Co-Principal Investigator (with Charles Consel). FF 250 000.
- **France Télécom/CNET (CTI)**, 1995-1998, *Adaptation dynamique de programmes système par spé-cialisation incrémentale*, Co-Principal Investigator (with Charles Consel). FF 990 000.
- **Conseil Régional de Bretagne**, 1997-1998, *Optimisation de Java pour les services multimédia*, Co-Principal Investigator (with Charles Consel). FF 500 000.
- **Conseil Régional de Bretagne**, 1994-1995, *Étude et mise en œuvre d'une plate-forme ATM locale*, Technical supervision, Principal Investigator Michel Banâtre. FF 660 000.

- **DRET**, 1990-1994, *Étude et réalisation d'une architecture multiprocesseur tolérante aux pannes et du système opératoire associé*, Technical supervision, Principal Investigators Jean-Pierre Banâtre and Michel Banâtre. FF 1 600 000.
- **MRT**, 1989-1992, *Conception et réalisation de cartes prototypes "Mémoire stable"*, Technical supervision, Principal Investigators Jean-Pierre Banâtre and Michel Banâtre. FF 660 000.
- **DRET**, 1987-1988, *Mécanismes logiciels de reprise dans une architecture tolérante aux pannes*, Technical supervision, Principal Investigator Jean-Pierre Banâtre. FF 80 000.

PhD Thesis Supervised

- **Florian David**, *Continuous and Efficient Lock Profiling for Java on Multicore Architectures*, University of Paris 6, July 2015, co-supervised with Gaël Thomas.
- **Lisong Guo**, *Boost the Reliability of the Linux Kernel – Debugging Kernel Oopses*, University of Paris 6, December 2014, co-supervised with Julia Lawall.
- **Koutheir Attouchi**, *Managing Resource Sharing Conflicts in an Open Embedded Software Environment*, University of Paris 6, July 2014, co-supervised with Gaël Thomas. Cifre with Orange Labs.
- **Jean-Pierre Lozi**, *Amélioration des applications multi-fils patrimoniales par la technique du Remote Core Locking (RCL)*, University of Paris 6, July 2014, co-supervised with Gaël Thomas.
- **Suman Saha**, *Improving the Quality of Error-Handling Code in Systems Software using Function-Local Information*, University of Paris 6, March 2013, co-supervised with Julia Lawall. William Carter Award at DSN 2013.
- **Fabien Hermenier**, *Gestion dynamique des tâches dans les grappes, une approche à base de machines virtuelles*, École des Mines de Nantes, November 2009, co-supervised with Jean-Marc Menaud.
- **Nicolas Lorient**, *Évolution dynamique des systèmes d'exploitation, une approche par aspects*, École des Mines de Nantes, December 2007, co-supervised with Jean-Marc Menaud.
- **Luciano Porto Barreto**, *Conception aisée et robuste d'ordonnanceurs de processus au moyen d'un langage dédié*, Université de Rennes 1, June 2003.
- **Philippe Boinot**, *Approche déclarative à l'adaptation de systèmes de télécommunications*, Université de Rennes 1, June 2002.
- **Laurent Réveillère**, *Approche langage au développement de pilotes de périphériques robustes*, Université de Rennes 1, December 2001, co-supervised with Charles Consel.
- **Ulrik Pagh Schultz**, *Object-Oriented Software Engineering using Partial Evaluation*, Université de Rennes 1, December 2000, co-supervised with Charles Consel.
- **Eugen-Nicolae Volanschi**, *Une approche automatique à la spécialisation de programmes système*, Université de Rennes 1, February 1998, co-supervised with Charles Consel.
- **Nadine Peyrouze**, *Conception et réalisation d'un système de gestion de fichier NFS efficace et sûr de fonctionnement*, Université de Rennes 1, September 1995.

- **Bruno Rochat**, *Une approche à la construction de services fiables dans les systèmes distribués*, Université de Rennes 1, February 1992, co-supervised with Michel Banâtre.

Professional Activities

- **Team leader of the Inria Large Scale Initiative on “Multicore virtualization for performance scaling and portability”.**
 - **Member of the EuroSys steering committee 2013-2016.**
 - **Member of the IFIP 10.4 working group on dependability.**
 - Leader of the working group on “Hardware’s & Operating System’s Support” of the EuroTM COST Action on Transactional Memories.
 - **Vice-chair of ACM/SIGOPS from July 2003 to June 2007.**
 - Chair of the French chapter of ACM/SIGOPS October 2002 - March 2005.
 - Treasurer of the French chapter of ACM/SIGOPS April 2000 - September 2002.
 - Jury member for the award of the best EuroSys PhD thesis in Systems (Roger Needham Award), in 2007, 2008, 2009, 2011, 2014.
-
- PC member of EDCC 2016, Göteborg, Sweden, September 2016.
 - PC member of DSN 2016, Toulouse, France, June 2016.
 - PC member of APLOS 2016, Atlanta, Georgia, USA, March 2016.
 - PC member of TRIOS 2015, Monterey, California, USA, October 2015.
 - PC member of EDCC 2015, Paris, France, September 2015.
 - Co-organizer of PLOS 2015, Monterey, California, USA, October 2015.
 - PC member of DSN 2015, Rio de Janeiro, Brazil, June 2015.
 - Wine chair, Sponsor co-chair, Grant co-chair of Eurosys 2015, Bordeaux, France, April 2015.
 - PC member of WOSD 2014, Naples, Italy, November 2014.
 - PC member of TRIOS 2014, Broomfield, Colorado, USA, October 2014.
 - PC member of APSYS 2014, Beijing, China, June 2014.
 - Program committee of VEE 2014, Salt Lake City, USA, March 2014.
 - Program committee of IEEE CloudCom 2013, virtualization track, Bristol, UK, December 2013.

- Co-organizer of PLOS 2013, Nemaquin Woodlands Resort, Pennsylvania, USA, November 2013.
- Program committee of DSN 2013, Budapest, Hungary, June 2013.
- Program committee of EuroSys 2013, Prague, Czech Republic, April 2013.
- Program committee of ICDCN 2013, Mumbai, India, January 2013.
- Poster Chair of DSN 2012, Boston, USA, June 2012.
- **Co-chair of track on Distributed OS and Middleware of ICDCS 2012, Macau, China, June 2012.**
- Program committee of SYSTOR 2012, Haifa, Israel, June 2012.
- Poster Chair of EuroSys 2012, Bern, Switzerland, April 2012.
- Program committee of SRDS 2011, Madrid, Spain, October 2011.
- Program committee and co-organizer of PLOS 2011, Cascais, Portugal, October 2011.
- Program committee of APSys 2011, Shanghai, China, July 2011.
- Program committee of CFSE-8 (8th Conférence française sur les systèmes d'exploitation), St-Malo, May 2011.
- Program committee of SYSTOR 2011, Haifa, Israel, May 2011.
- Program committee of the 5th EuroSys Doctoral workshop, Salzburg, April 2011.
- Program committee of HotDep'10, Vancouver, Canada, October 2010.
- Program committee of DCCS/DSN'2010 (IEEE Conference on Dependable Systems and Networks), Chicago, IL, June 2010.
- **Program chair of EuroSys 2010, Paris, April 2010.**
- Program committee of SSS'09 (International Symposium on Stabilization, Safety and Security of Distributed Systems, track multicore computing), Lyon, November 2009.
- **Program chair of PLOS 2009 (5th Workshop on Programming Languages and Operating Systems), Big Sky, MT, USA, October 2009.**
- Program committee of CFSE-7 (7th Conférence française sur les systèmes d'exploitation), Toulouse, September 2009.
- Program committee of ICWS 2009 (IEEE International Conference on Web Services), Los Angeles, July 2009.
- Program committee of ACP4IS 2009 (7th Workshop on Aspects, Components, and Pattern for Infrastructure Software), Charlottesville, Virginia, March 2009.
- Program committee of ICWS 2008 (IEEE International Conference on Web Services), Beijing, September 2008.

- Program committee of ASPLOS'2008 (ACM International Conference on Architectural Support for Programming Languages and Operating Systems), Seattle, March 2008.
- Program committee of EDCC'2008 (European Dependable Computing Conference), Kaunas, Lithuania, 2008.
- Program committee of DSN/PDS 2008 (IEEE Conference on Dependable Systems and Networks), Anchorage, Alaska, June 2008.
- Program committee of HASE'2008 (11th IEEE High Assurance Systems Engineering Symposium), Nanjing, China, December 2008.
- Program committee of CFSE-6 (6th Conférence française sur les systèmes d'exploitation), Fribourg, February 2008.
- Program committee of ICWS 2007 (IEEE International Conference on Web Services), Salt Lake City, July 2007.
- Program committee of DCCS/DSN'2007 (IEEE Conference on Dependable Systems and Networks), Edinburgh, June 2007.
- Program committee of ICDCS'2007 (IEEE International Conference on Distributed Computing Systems), Toronto, June 2007.
- Program committee of ISORC'2007 (10th IEEE International Symposium on Object and component-oriented Real-time distributed), Santorin, Greece, May 2007.
- Program committee of EuroSys 2007 (ACM Sigops/EuroSys Conference), Lisbon, March 2007.
- Program committee of PLOS 2006 (Linguistic Support for Modern Operating Systems, ASPLOS XII Workshop), San José, October 2006.
- Program committee of SRDS 2006 (25th IEEE Symposium on Reliable Distributed Systems), Leeds, October 2006.
- Program committee of DCCS/DSN'2006 (IEEE Conference on Dependable Systems and Networks), Philadelphia, June 2006.
- Program committee of CFSE-5 (5-Ieme Conférence française sur les systèmes d'exploitation), Perpignan, October 2006.
- Jury member for award of the best French thesis in operating system, October 2006 during CFSE-5.
- Program committee and Poster chair of EuroSys 2006 (ACM Sigops/EuroSys Conference), Leuven, April 2006.
- Program committee of ISORC'2006 (9th IEEE International Symposium on Object and component-oriented Real-time distributed), Gyeongju, Korea, April 2006.
- Publicity chair of Middleware 2005 (ACM/IFIP/USENIX 6th International Middleware Conference), Grenoble, November 2005.

- Program committee of SRDS 2005 (24th IEEE Symposium on Reliable Distributed Systems), Orlando, October 2005.
- Program committee of HASE 2005 (9th Intl. Symposium on High Assurance Systems Engineering), Heidelberg, October 2005.
- Program committee of SaNSO 2005 (First international workshop on System and Networking for Smart Objects), Fukuoka, July 2005.
- Program committee of ICPP-05 (International Conference on Parallel Processing), Oslo, June 2005.
- Program committee of ICDCS-2005 (International Conference on Distributed Computing Systems), Columbus (Ohio), June 2005.
- Program committee of ISAS 2005 (Second International Service Availability Symposium), Berlin, April 2005.
- Program committee of CFSE-4 (4^{ème} Conférence française sur les systèmes d'exploitation), Le Croisic, April 2005.
- Program Chair of Renpar 2005, Le Croisic, April 2005.
- General Chair of Renpar/CFSE/SympaAA/JC 2005, Le Croisic, April 2005.
- Program committee of EW2004 (11th ACM European Sigops Workshop), Leuven, September 2004.
- Program committee of PLOS-2004 (ECOOP Workshop on Programming Languages and Operating Systems), Oslo, June 2004.
- Program committee of DSN'2004 (IEEE Conference on Dependable Systems and Networks), Firenze, June 2004.
- Program committee of FTDCS'2004 (International Workshop on Future Trends of Distributed Computing Systems), Suzhou (China), May 2004.
- Program committee of DAIS'2003 (4th IFIP International Conference on Distributed Applications ' & Interoperable Systems), Paris, November 2003.
- Program committee of CFSE-3 (3^{ème} Conférence française sur les systèmes d'exploitation), La Colle sur Loup, October 2003.
- Jury member for award of the best French thesis in operating system issued in October 2003 during CFSE-3. Award sponsored by the ASF (French chapter of the ACM/SIGOPS) and Microsoft.
- Program committee of DSN'2003 (IEEE Conference on Dependable Systems and Networks), San Francisco, June 2003.
- General Chair of the tenth ACM SIGOPS European Workshop, St-Emilion, September 2002.
- Program committee of EDCC-4 (European Dependable Computing Conference), Toulouse, October 2002.

- Program committee of SRDS'2001 (IEEE Symposium on Reliable Distributed Systems), New-Orleans, October 2001.
- Program committee of DSN'2001 (IEEE Conference on Dependable Systems and Networks), Gäddede, Sweden, July 2001.
- Program committee of CFSE-2 (2^{ème} Conférence française sur les systèmes d'exploitation), Paris, April 2001.
- Jury member for the award of the best French thesis in operating system issued in April 2001 during CFSE-2. Award sponsored by the ASF (French chapter of the ACM/SIGOPS).
- Program committee of SRDS'2000 (Symposium on Reliable Distributed Systems), Nürnberg, October 2000.
- Program committee of PEPM'00 (ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation), Boston, December 1999.
- Program committee of SRDS'99 (Symposium on Reliable Distributed Systems), Lausanne, Switzerland, October 1999.
- Program committee of EDCC-3 (European Dependable Computing Conference), Prague, Czech Republic, September 1999.
- Program committee of EDCC-2 (European Dependable Computing Conference), Taormina, Italy, October 1996.

Bibliography

The most significant papers are printed in bold face.

Proceedings

- [A1] C. Morin, G. Muller, *Proceedings of the 5th European conference on Computer systems (EuroSys)*, 2010, Paris, France.
- [A2] E. Eide, G. Muller, O. Spinczyk, *Proceedings of the fifth workshop on programming languages and operating systems (PLOS)*, Big Sky, Montana, October 2009.

Journal Papers

- [J1] **J-P. Lozi, F. David, G. Thomas, J. Lawall, G. Muller, Fast and Portable Locking for Multicore Architectures *ACM Transactions on Computer Systems* 33 (4): 13, 2016.**
- [J2] W. Maldonado, P. Marlier, P. Felber, J. Lawall, G. Muller, E. Rivière, Supporting Time-Based QoS Requirements in Software Transactional Memory, *ACM Transactions on Parallel Computing* 2(2): 10, 2015.
- [J3] T.F. Bissyandé, L. Réveillère, Y.-D. Bromberg, J. Lawall, G. Muller, Implementing an embedded compiler using program transformation rules, *Software:Practice and Experience*, 10.1002/spe.2225. p. 177–196, January 2015, 45(2).
- [J4] **N. Palix, S. Saha, G. Thomas, C. Calvès, J. Lawall, G. Muller, Faults in Linux 2.6, *ACM Transactions On Computer Systems*. 2014, 4:1-4:40.**
- [J5] T. Bissyandé, L. Réveillère, J. Lawall, G. Muller, Automatic Generation of Debugging Interfaces to the Linux Kernel, *Journal of Automated Software Engineering*.
- [J6] F. Hermenier, J. Lawall, G. Muller, BtrPlace: A Flexible Consolidation Manager for Highly Available Applications, *Transactions on Dependable and Secure Computing*, p. 273-286, September 2013.
- [J7] J. Lawall, J. Brunel, N. Palix, R. R. Hansen, H. Stuart, G. Muller, WYSIWIB: Exploiting Fine-Grained Program Structure in a Scriptable API-Usage Protocol Finding Process, *Software:Practice and Experience*, 37(13), January 2013.
- [J8] S. Legtchenko, S. Monnet, P. Sens, G. Muller, RelaxDHT: a churn-resilient replication strategy for peer-to-peer distributed hash-tables, *ACM Transactions on Autonomous and Adaptive Systems*, July 2012, 7(2).
- [J9] L. Burgy, L. Réveillère, J. Lawall, G. Muller, Zebu: A Language-Based Approach for Network Protocol Message Processing, *IEEE Transactions on Software Engineering*, 37(4), p. 575-591, 2011.
- [J10] P. Cointe, J. Noyé, R. Douence, T. Ledoux, J.-M. Menaud, G. Muller, M. Südholt, Programmation post-objets : des langages d’aspects aux langages de composants, *RSTI L’Objet, colloque en l’honneur de Jean-François Perrot* 10, 4, 2004.

- [J11] G. Muller, J. Lawall, S. Thibault, R. E. V. Jensen, **A Domain-Specific Language Approach to Programmable Networks**, *IEEE - Transactions on Systems, Man and Cybernetics*, 2003.
- [J12] D. McNamee, J. Walpole, C. Pu, C. Cowan, C. Krasic, C. Goel, C. Consel, G. Muller, and R. Marlet. **Specialization tools and techniques for systematic optimization of system software**. *ACM Transactions on Computer Systems*, 19, 2001, p. 217–251.
- [J13] L. Clausen, U. Schultz, C. Consel, and G. Muller. **Java bytecode compression for low-end embedded systems**. *ACM Transactions on Programming Languages and Systems*, 22(3), 2000, p. 471–489.
- [J14] S. Thibault, C. Consel, R. Marlet, G. Muller, and J. Lawall. **Static and dynamic program compilation by interpreter specialization**. *Higher-Order and Symbolic Computation* 13, 3, 2000, p. 161–178.
- [J15] G. Muller, R. Marlet, and E.N. Volanschi. **Accurate Program Analyses for Successful Specialization of Legacy System Software** *Theoretical Computer Science*, 248(1–2), 2000, p. 201–210.
- [J16] G. Muller and U. Schultz. **Harissa: A hybrid approach to Java execution**. *IEEE Software*, p. 44–51, 1999.
- [J17] C. Consel, L. Hornof, J. Lawall, R. Marlet, G. Muller, J. Noyé, S. Thibault, and N. Volanschi. **Tempo: Specializing systems applications and beyond**. *ACM Computing Surveys, Symposium on Partial Evaluation*, 30(3), 1998.
- [J18] C. Consel, L. Hornof, J. Lawall, R. Marlet, G. Muller, J. Noyé, S. Thibault, and N. Volanschi. **Partial evaluation for software engineering**. *ACM Computing Surveys, Symposium on Partial Evaluation*, 30(3), 1998.
- [J19] G. Muller, M. Banâtre, N. Peyrouze, et B. Rochat. **Lessons from FTM: an experiment in the design & implementation of a low cost fault tolerant system**. *IEEE Transaction on Reliability*, June 1996. Extended version appeared in INRIA research report 2517.
- [J20] M. Banâtre, P. Joubert, C. Morin, G. Muller, B. Rochat, et P. Sanchez. **Stable transactional memories and fault tolerant architectures**. *Operating System Review*, 25:68–72, 1991.
- [J21] J. P. Banâtre, M. Banâtre, et G. Muller. **Quelques aspects du système Gothic**. *Techniques et Sciences Informatiques*, 6(2), 1987.

Book Chapters

- [B1] G. Muller, C. Consel, et C. Pu. **Specialization**. In J. Urban, et P. Dasgupta, editors, *Encyclopedia of Distributed Computing*, Kluwer Academic Publisher. 1999, To appear.
- [B2] G. Muller and P. Sens. **Migration et points de reprise dans les systèmes distribués : techniques de mise en œuvre et mécanismes communs**. In *Placement Dynamique et Répartition de Charge : application aux systèmes parallèles et répartis*, p. 57–80. INRIA, 1997.
- [B3] G. Muller. **Gothic : le concept de mémoire stable et son utilisation**. In J. P. Banâtre, M. Banâtre, éditeurs, *Expérience dans la construction d'un système distribué: Gothic*, chapitre 7, p. 177–216. InterEditions, 1991.

Conference Papers

- [C1] G. Lena Cota, S. Ben Mokhtar, J. Lawall, G. Muller, G. Gianini, E. Damiani, L. Brunie A Framework for the Design Configuration of Accountable Selfish-Resilient Peer-to-Peer Systems *in : SRDS 2015*, p. 276-285. Montreal, Canada, October 2015.
- [C2] K. Attouchi, G. Thomas, J. Lawall, G. Muller, A .Bottaro, Incinerator - Eliminating Stale References in Dynamic OSGi Applications *in : DSN 2015*. Rio de Janeiro, Brazil, June 2015.
- [C3] F. David, G. Thomas, J. Lawall, G. Muller Continuously Measuring Critical Section Pressure with the Free Lunch Profiler *in : OOPSLA 2014*, p. 291-307. Portland, Oregon USA, October 2014.
- [C4] K. Attouchi, G. Thomas, A .Bottaro, G. Muller, Memory monitoring in a multi-tenant OSGi execution environment, *in : 17th international ACM Sigsoft symposium on Component-based software engineering (CBSE 2014)*, p. 107-116. Marcq-en-Baroeul, Lille, France, June 2014.
- [C5] L. Guo, J. Lawall, G. Muller, Oops! where did that code snippet come from?, *in : Mining Software Repository (MSR 2014)*, p. 52-61. Hyderabad, India, May 2014.
- [C6] **S. Saha, J-P. Lozi, G. Thomas, J. Lawall, G. Muller, Hector: Detecting Resource-Release Omission Faults in Error-Handling Code for Systems Software, in : 43rd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2013), p. 1-12. Budapest, Hungary, June 2013. William Carter award.**
- [C7] J-T. Wamhoff, C. Fetzer, P. Felber, E. Riviere, G. Muller, FastLane: improving performance of software transactional, memory for low thread counts *in : ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming, (PPoPP 2013)*, p. 113-122. Shenzhen, China, February 2013.
- [C8] **T. Bissyandé, L. Réveillère, J. Lawall, G. Muller, Diagnosys: Automatic Generation of a Debugging Interface to the Linux kernel, in : 27th IEEE/ACM International Conference on Automated Software Engineering (ASE 2012), p. 60-69. Essen, Germany, September 2012. Best paper award.**
- [C9] **J-P. Lozi, F. David, G. Thomas, J. Lawall, G. Muller, Remote Core Locking: Migrating Critical-Section Execution to Improve the Performance of Multithreaded Applications, in : Usenix Annual Technical Conference (ATC 2012), p. 65-76. Boston, MA, USA, June 2012.**
- [C10] W. Maldonado, P. Marlier, P. Felber, J. Lawall, G. Muller, E. Rivière, Deadline-Aware Scheduling for Software Transactional Memory, *in : 41th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2011)*, p. 257-268. Hong Kong, China, June 2011.
- [C11] S. Saha, J. Lawall, G. Muller, An Approach to Improving the Structure of Error-Handling Code in the Linux Kernel, *in : ACM SIGPLAN/SIGBED Conference on Languages, Compilers, Tools and Theory for Embedded Systems*, p. 41-50. Chicago, IL, USA, April 2011.
- [C12] **N. Palix, S. Saha, G. Thomas, C. Calvès, J. Lawall, G. Muller, Faults in Linux: Ten Years Later, in : Sixteenth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS 2011), p. 305-318. Newport Beach, CA, USA, March 2011.**
- [C13] T. Bissyandé, L. Réveillère, Y-D. Bromberg, J. Lawall, G. Muller, Bridging the Gap between Legacy Services and Web Services, *in : the 11th ACM/IFIP/USENIX International Conference on Middleware*, p. 273-292. Bangalore, India, November 2010.

- [C14] F. Gaud, S. Geneves, R. Lachaize, B. Lepers, F. Mottet, G. Muller, V. Quéma, Efficient Workstealing for Multicore Event-Driven Systems *in: 2010 International Conference on Distributed Computing Systems (ICDCS 2010)*, p. 516-525. Genova, Italy, June 2010.
- [C15] J. Lawall, B. Laurie, R. R. Hansen, N. Palix, G. Muller, Finding Error Handling Bugs in OpenSSL Using Coccinelle, *in: 8th European Dependable Computing Conference (EDCC-8)*, p. 191-196. Valencia, Spain, April 2010.
- [C16] N. Geoffray, G. Thomas, J. Lawall, G. Muller, B. Folliot, VMKit: a substrate for managed runtime environments, *in: 6th International Conference on Virtual Execution Environments (VEE 2010)*, p. 51-62. Pittsburgh, Pennsylvania, USA, March 2010.
- [C17] N. Palix, J. Lawall, G. Muller, Tracking code patterns over multiple software versions with Herodotos, *in: 9th International Conference on Aspect-Oriented Software Development*, p. 169-180. Rennes and Saint-Malo, France, March 2010.
- [C18] W. Maldonado, P. Marlier, P. Felber, J. Lawall, G. Muller, A. Suissa, D. Hendler, A. Fedorova, Scheduling support for transactional memory contention management, *in: 15th ACM SIGPLAN Annual Symposium on Principles and Practice of Parallel Programming*, p. 79-90. Bangalore, India, January 2010.
- [C19] S. Legtchenko, S. Monnet, P. Sens, G. Muller, Churn-resilient replication strategy for peer-to-peer distributed hash-tables, *in: The 11th International Symposium on Stabilization, Safety, and Security of Distributed Systems*, p. 485-499. Lyon, France, November 2009.
- [C20] Y-D. Bromberg, L. Réveillère, J. Lawall, G. Muller, Automatic generation of network protocol gateways, *in: the 10th ACM/IFIP/USENIX International Conference on Middleware*, Urbana, Illinois, November 2009.
- [C21] N. Geoffray, G. Thomas, G. Muller, P. Parrend, S. Frénot, B. Folliot, I-JVM: a Java Virtual Machine for Component Isolation in OSGi, *in: the 39th IEEE/IFIP International Conference on Dependable Systems and Networks - Dependable Computing and Communications Symposium*, Estoril, Portugal, June 2009.
- [C22] J. L. Lawall, J. Brunel, N. Palix, R. R. Hansen, H. Stuart, G. Muller, WYSIWIB: A Declarative Approach to Finding API Protocols and Bugs in Linux Code, *in: the 39th IEEE/IFIP International Conference on Dependable Systems and Networks - Dependable Computing and Communications Symposium*, Estoril, Portugal, June 2009.
- [C23] F. Hermenier, X. Lorca, J.M. Menaud, G. Muller, J. Lawall, Entropy: a Consolidation Manager for Clusters, *in: The 2009 ACM SIGPLAN/SIGOPS International Conference on Virtual Execution Environments*, Washington DC, March 2009.
- [C24] **J. Brunel, D. Doliguez, R. R. Hansen, J. Lawall, G. Muller, A Foundation for Flow-Based Program Matching Using Temporal Logic and Model Checking, *in: The 36th Annual ACM SIGPLAN - SIGACT Symposium on Principles of Programming Languages*, Savannah, Georgia, USA, January, 2009.**

- [C25] Y. Padioleau, J. L. Lawall, G. Muller, **Documenting and Automating Collateral Evolutions in Linux Device Drivers**, in : *The 3rd ACM SIGOPS EuroSys conference (EuroSys 2008)*, p. 247-260. Glasgow, Scotland, april 2008.
- [C26] L. Burgy, L. Réveillère, J. Lawall, G. Muller, A Language-Based Approach for Improving the Robustness of Network Application Protocol Implementations, in *26th IEEE International Symposium on Reliable Distributed Systems*, p. 149–160. october 2007.
- [C27] R. URUNUELA, J. LAWALL, G. MULLER, Energy Adaptation for Multimedia Information Kiosks, in : *International Conference on Embedded Software, EMSOFT'06*, S. Min, W. Yi (réd.), ACM, Seoul, South Korea, October 2006.
- [C28] Y. PADIOLEAU, J. L. LAWALL, G. MULLER, **Understanding Collateral Evolution in Linux Device Drivers**, in : *The first ACM SIGOPS EuroSys conference (EuroSys 2006)*, p. 59–71, Leuven, Belgium, April 2006. Also available as INRIA Research Report RR-5769.
- [C29] J.-P. BODEVEIX, M. FILALI, J. LAWALL, G. MULLER, Formal Methods Meet Domain Specific Languages, in : *Fifth International Conference on Integrated Formal Methods*, J. Romijn, G. Smith, J. van de Pol (réd.), *Lecture Notes in Computer Science*, 3771, p. 187–206, Eindhoven, The Netherlands, November 2005.
- [C30] G. Muller, J. L. Lawall, H. Duchesne, **A Framework for Simplifying the Development of Kernel Schedulers: Design and Performance Evaluation**, in : *HASE 2005 - High Assurance Systems Engineering Conference*, Heidelberg, Germany, October 2005.
- [C31] J. Lawall, H. Duchesne, G. Muller, A.-F. L. Meur, Bossa Nova: Introducing Modularity into the Bossa Domain-Specific Language, in : *Generative Programming and Component Engineering: Fourth International Conference, GPCE 2004*, Tallinn, Estonia, September 2005.
- [C32] J.L. Lawall, A.-F. Le Meur, G. Muller, **On Designing a Target-Independent DSL for Safe OS Process-Scheduling Components**, in : *3rd International Conference on Generative Programming and Component Engineering (GPCE'04)*, p. 436–455, Vancouver, Canada, October 2004.
- [C33] J.L. Lawall, G. Muller, and H. Duchesne, Language Design for Implementing Process Scheduling Hierarchies, in : *ACM SIGPLAN 2004 Symposium on Partial Evaluation and Program Manipulation (PEPM'04)*, p. 80–91, Verona, Italy, August 2004. Invited Paper.
- [C34] R.A. Aberg, J.L. Lawall, M. Sudhot, G. Muller, A.-F. Le Meur, On the automatic evolution of an OS kernel using temporal logic and AOP, in : *Proceedings of the 18th IEEE International Conference on Automated Software Engineering 2003 (ASE 2003)*, p. 196–204, Montreal, Canada, October 2003.
- [C35] M. Ségura-Devillechaise, J.-M. Menaud, G. Muller, J. Lawall, Web Cache Prefetching as an aspect: Towards a Dynamic-Weaving Based Solution, in : *Proceedings of the 2nd international conference on Aspect-oriented software development*, ACM Press, p. 110–119, Boston, USA, March 2003.
- [C36] L. P. Barreto, G. Muller, Bossa: a Language-based Approach to the Design of Real-time Schedulers, in : *10th International Conference on Real-Time Systems (RTS'2002)*, p. 19–31, Paris, France, March 2002.

- [C37] J.-P. Fassino, J.-B. Stefani, J. Lawall, G. Muller, THINK: A Software Framework for Component-based Operating System Kernels , *in: USENIX'02*, USENIX, p. 73–86, Monterey, CA, USA, June 2002.
- [C38] D. He, G. Muller, J. Lawall, Distributing MPEG movies over the Internet using programmable networks , *in: The 22nd International Conference on Distributed Computing Systems (ICDCS'02)*, p. 161-170, Vienna, Austria, July 2002.
- [C39] **L. Réveillère and G. Muller. Improving driver robustness: an evaluation of the Devil approach. In *Proceedings of the International Conference on Dependable Systems and Networks*, p. 131-140, Göteborg, Sweden, 2001. IEEE Computer Society Press.**
- [C40] **F. Mérillon, L. Réveillère, C. Consel, R. Marlet, and G. Muller. Devil: An IDL for hardware programming. In *Proceedings of the Fourth Symposium on Operating Systems Design and Implementation*, p. 17-30, San Diego, California, October 2000. USENIX Association.**
- [C41] L. Réveillère, F. Mérillon, C. Consel, R. Marlet, and G. Muller. A DSL approach to improve productivity and safety in device drivers development. In *Proceedings of the 15th IEEE International Conference on Automated Software Engineering (ASE 2000)*, p. 101-109, Grenoble, France, September 2000. IEEE Computer Society Press.
- [C42] P. Boinot, R. Marlet, J. Noyé, G. Muller, and C. Consel. A declarative approach for designing and developing adaptive components. In *Proceedings of the 15th IEEE International Conference on Automated Software Engineering (ASE 2000)*, p. 111-119, Grenoble, France, September 2000. IEEE Computer Society Press.
- [C43] **J.L. Lawall and G. Muller. Efficient incremental checkpointing of Java programs. In *Proceedings of the International Conference on Dependable Systems and Networks*, p. 61-70, New York, NY, USA, June 2000. IEEE Computer Society Press.**
- [C44] **U. Schultz, J. Lawall, C. Consel, and G. Muller. Towards automatic specialization of java programs. In *Proceedings of the European Conference on Object-oriented Programming (ECOOP'99)*, volume 1628 of *Lecture Notes in Computer Science*, p. 367-390, Lisbon, Portugal, June 1999.**
- [C45] **S. Thibault, J. Marant, and G. Muller. Adapting distributed applications using extensible networks. In *Proceedings of the 19th International Conference on Distributed Computing Systems*, p. 234-243, Austin, Texas, juin 1999. IEEE Computer Society Press.**
- [C46] S. Thibault, C. Consel, and G. Muller. Safe and efficient active network programming. In *17th IEEE Symposium on Reliable Distributed Systems*, p. 135-143, West Lafayette, Indiana, October 1998.
- [C47] G. Muller, R. Marlet, E.N. Volanschi, C. Consel, C. Pu, and A. Goel. Fast, optimized Sun RPC using automatic program specialization. In *Proceedings of the 18th International Conference on Distributed Computing Systems*, p. 240-249, Amsterdam, The Netherlands, June 1998. IEEE Computer Society Press.
- [C48] **E.N. Volanschi, C. Consel, G. Muller, et C. Cowan. Declarative specialization of object-oriented programs. In *OOPSLA'97 Conference Proceedings*, Atlanta, USA, October 1997. ACM Press.**

- [C49] G. Muller, B. Moura, F. Bellard, et C. Consel. Harissa: A flexible and efficient java environment mixing bytecode and compiled code. In *Proceedings of the 3rd Conference on Object-Oriented Technologies and Systems*, Portland, USA, June 1997.
- [C50] G. Muller, E.N. Volanschi, et R. Marlet. Scaling up partial evaluation for optimizing the Sun commercial RPC protocol. In *ACM SIGPLAN Symposium on Partial Evaluation and Semantics-Based Program Manipulation*, Amsterdam, The Netherlands, June 1997. ACM Press.
- [C51] **G. Muller et N. Peyrouze. FT-NFS: an efficient fault tolerant NFS server designed for off-the-shelf workstations. In Proc. of 26th International Symposium on Fault-Tolerant Computing Systems, Sendai (Japan), June 1996.**
- [C52] G. Cabillic, G. Muller et I. Puaut, The Performance of Consistent Checkpointing in Distributed Shared Memory Systems, In *Proc. of the 14th Symposium on Reliable Distributed Systems*, IEEE Computer Society Press, p. 96-105, Bad Neuenahr (Germany), September 1995.
- [C53] G. Muller et C. Bryce. Matching micro-kernels to modern applications using fine-grained memory protection. In *In the proceedings of the seventh IEEE Symposium on Parallel and Distributed Processing*, p. 272-279, San Antonio (Tx), October 1995.
- [C54] G. Muller, M. Hue, et N. Peyrouze. Performance of consistent checkpointing in a modular operating system: Results of the FTM experiment. In K. Echtle, D. Hammer, et D. Powell, éditeurs, *Dependable Computing - EDCC1*, volume 852 of *LNCS*, p. 491-508, Berlin (Germany), 1994. Springer Verlag.
- [C55] V. Issarny, G. Muller, et I. Puaut. Efficient treatment of failures in RPC systems. In *Proceedings of the Thirteenth Symposium on Reliable Distributed Systems*, p. 170-180, Dana Point, USA, 1994.
- [C56] M. Banâtre, P. Heng, G. Muller, N. Peyrouze, et B. Rochat. An experience in the design of a reliable object based system. In *Proc. of the 2nd Conference on Parallel and Distributed Information Systems*, p. 187-190, San Diego (CA), 1993.
- [C57] G. Muller, B. Rochat, et P. Sanchez. A stable transactional memory for building robust object oriented programs. In *EuroMicro 91*, p. 359-364, Vienna (Austria), 1991.
- [C58] **M. Banâtre, G. Muller, B. Rochat, et P. Sanchez. Design decisions for the FTM : A general purpose fault tolerant machine. In Proc. of 21st International Symposium on Fault Tolerant Computing Systems, p. 71-78, Montréal, Canada, 1991.**
- [C59] M. Banâtre, P. Heng, G. Muller, et B. Rochat. How to design reliable servers using fault tolerant micro-kernel mechanisms. In *USENIX Mach Symposium*, p. 223-231, Monterey, California, 1991.
- [C60] G. Muller, B. Michel, et P. Lecerten. A Unix environment for the Gothic kernel. In *EUUG 88*, p. 219-229, London (GB), 1988.
- [C61] J. P. Banâtre, M. Banâtre, et G. Muller. Ensuring data security and integrity with a fast stable storage. In *Proc. of 4th International Conference on Data Engineering*, p. 285-293, Los Angeles, 1988.
- [C62] J.P Banâtre, M. Banâtre, et G. Muller. Main aspects of the Gothic distributed system. In *European Teleinformatics Conference on Research into Networks and Distributed Applications*, p. 747-760, Vienna, Austria, 1988.

Workshop Papers

- [W1] P. Senna, L. Réveillère, L. Jiang, D. Lo, J. Lawall, G. Muller, Understanding the Genetic Makeup of Linux Device Drivers *in: 7th Workshop on Programming Languages and Operating Systems (PLOS 2013)*, Namacolin Woodlands Resort, Pennsylvania, USA, November 2013.
- [W2] J-T. Wamhoff, P. Felber, C. Fetzer, G. Muller, E. Rivière, FastLane: Streamlining Transactions for Low Thread Counts *in: 7th ACM SIGPLAN Workshop on Transactional Computing (TRANSACT 2012)*, New Orleans, LA, USA, February 2012.
- [W3] S. Saha, J. Lawall, G. Muller, Finding Resource-Release Omission Faults in Linux *in: 6th Workshop on Programming Languages and Operating Systems (PLOS 2011)*, Cascais, Portugal, October 2011.
- [W4] N. Palix, J. L. Lawall, G. Thomas, G. Muller, How Often Do Experts Make Mistakes?, *in: 9th Workshop on Aspects, Components, and Patterns for Infrastructure Software (ACP4IS '10)*, Rennes, march 2010.
- [W5] J. L. Lawall, G. Muller, N. Palix, Enforcing the Use of API Functions in Linux Code, *in: 8th Workshop on Aspects, Components, and Patterns for Infrastructure Software (ACP4IS '09)*, Charlottesville, VI, USA, march 2009.
- [W6] H. Stuart, R. R. Hansen, J. L. Lawall, J. Andersen, Y. Padioleau, G. Muller, Towards Easing the Diagnosis of Bugs in OS Code, *in: 4th Workshop on Programming Languages and Operating Systems (PLOS 2007)*, Skamania Lodge Stevenson, Washington, USA, october 2007.
- [W7] Y. PADIOLEAU, R. R. HANSEN, J. L. LAWALL, G. MULLER, « Semantic Patches for Documenting and Automating Collateral Evolutions in Linux Device Drivers », *in: PLOS 2006: Linguistic Support for Modern Operating Systems*, San Jose, CA, octobre 2006.
- [W8] J.-P. BODEVEIX, M. FILALI, J. LAWALL, G. MULLER, « Automatic Verification of Bossa Scheduler Properties », *in: Sixth International Workshop on Automated Verification of Critical Systems*, Nancy, France, septembre 2006.
- [W9] Y. PADIOLEAU, J. L. LAWALL, G. MULLER, « SmPL: A Domain-Specific Language for Specifying Collateral Evolutions in Linux Device Drivers », *in: International ERCIM Workshop on Software Evolution (2006)*, Lille, France, avril 2006.
- [W10] J.-P. BODEVEIX, M. FILALI, J. LAWALL, G. MULLER, Applying the B formal method to the Bossa domain-specific language, *in: The 17th Nordic Workshop on Programming Theory (NWPT'05)*, Copenhagen, Denmark, October 2005.
- [W11] J. L. Lawall, G. Muller, R. Urnuela, Tarantula: Killing Driver Bugs Before They Hatch, *in: The 4th AOSD Workshop on Aspects, Components, and Patterns for Infrastructure Software (ACP4IS)*, p. 13–18, Chicago, IL, March 2005.
- [W12] G. MULLER, J. LAWALL, H. DUCHESNE, A Framework for Simplifying the Development of Kernel Schedulers: Design and Performance Evaluation, *in: Tenth IEEE International Workshop on Object-oriented Real-time Dependable Systems (WORDS 2005)*, p. 219–230, Sedona, AZ, February 2005.

- [W13] G. Muller, J.L. Lawall, J.-M. Menaud, M. Sudholt, Constructing Component-Based Extension Interfaces in Legacy Systems Code, *in: 11th ACM SIGOPS European Workshop*, p. 80–85, Leuven, Belgium, September 2004.
- [W14] J.L. Lawall, A.-F. Le Meur, G. Muller, Modularity for the Bossa Process-Scheduling Language, *in: ECOOP Workshop on Programming Languages and Operating Systems (ECOOP-PLOS 2004)*, Oslo, Norway, June 2004. Technical report TR-ICS-04-22, Donald Bren School of Information and Computer Science, University of California, Irvine. p. 1-5.
- [W15] R. A. Åberg, J. Lawall, M. SÃ¼dholt, G. Muller, Evolving an OS Kernel using Temporal Logic and Aspect-Oriented Programming , *In The Second AOSD Workshop on Aspects, Components, and Patterns for Infrastructure Software (ACP4IS)*, March 2003.
- [W16] **J. Lawall, G. Muller, L. P. Barreto, Capturing OS Expertise in an Event Type System: the Bossa Experience , *In : Tenth ACM SIGOPS European Workshop 2002 (EW2002)*, p. 54–61, St. Emilion, France, September 2002.**
- [W17] L. P. Barreto, R. Douence, G. Muller, M. SÃ¼dholt, Programming OS Schedulers with Domain-Specific Languages and Aspects: New Approaches for OS Kernel Engineering , *In : International Workshop on Aspects, Components, and Patterns for Infrastructure Software at AOSD*, April 2002.
- [W18] MÃ©rillon, F. and Muller, G. Dealing with hardware in embedded software: A general framework based on the Devil language. *In Proceedings of the The Workshop on Languages, Compilers and Tools for Embedded Systems (LCTES 2001)*, Snowbird, Utah, June 22-23. ACM SIGPLAN Notices, 36(8), p. 121-127, August 2001.
- [W19] **G. Muller, C. Consel, R. Marlet, L.P. Barreto, F. MÃ©rillon, and L. RÃ©veillÃ¨re. Towards robust oses for appliances: A new approach based on domain-specific languages. *In Proceedings of the ACM SIGOPS European Workshop 2000 (EW2000)*, p. 19-24, Kolding, Denmark, September 2000.**
- [W20] S. Gulwani, A. Tarachandani, D. Gupta, D. Sanghi, L.P. Barreto, G. Muller, and C. Consel. Webcal: A domain-specific language for web caching. *In Proceedings of the 5th International Web Caching and Content Delivery Workshop (WCW2000)*, Lisbon, Portugal, 2000.
- [W21] G. Muller, E.N. Volanschi, et R. Marlet. Automatic optimization of the Sun RPC protocol implementation via partial evaluation. *In European Research Seminar on Advances in Distributed Systems (ERSADS)*, March 1997.
- [W22] C. Consel E.N. Volanschi, G. Muller. Safe operating system specialization: the RPC case study. *In First ACM Workshop on Compiler Support for System Software*, February 1996.
- [W23] C. Bryce, V. Issarny, G. Muller, et I. Puaut. Towards safe and efficient customization in distributed systems. *In Proceedings of 6th ACM SIGOPS European Workshop "Matching Operating Systems to Applications needs"*, p. 57-61, Warden, Allemagne, 1994.
- [W24] G. Muller. A reliable client-server model on top of a micro-kernel. *In M. BanÃ¢tre and P.A. Lee, Ã©diteurs, Hardware and Software Architectures for Fault Tolerance: Experiences and Perspectives*, volume 774 of LNCS, p. 191-198, Le Mont Saint-Michel (France), 1993. Springer-Verlag.

- [W25] G. Muller et N. Peyrouze. Providing fault-tolerance through inheritance facility. In *ECOOP'93 Workshop on Object-Based Distributed Programming*, Kaiserslautern, 1993.
- [W26] M. Banâtre, P. Joubert, C. Morin, G. Muller, et B. Rochat. Using dynamic atomic actions to build fault tolerant systems. In *5th ACM SIGOPS European Workshop, Model and Paradigms for Distributed Systems Structuring*, Le Mont Saint-Michel, France, 1992.
- [W27] M. Banâtre, P. Joubert, C. Morin, G. Muller, B. Rochat, et P. Sanchez. Stable transactional memories and fault tolerant architectures. In *Proc. of Fourth ACM SIGOPS European Workshop, Fault Tolerance Support in Distributed Systems*, Bologna, Italy, 1990.
- [W28] J.P. Banâtre, M. Banâtre, et G. Muller. Architecture of fault tolerant multiprocessor workstations. In *Second Workshop on Workstation Operating Systems*, Pacific Groove (CA), 1989. IEEE Computer Society.

Other Conferences and Research Reports

- [O1] J. Lawall, R. R. Hansen, N. Palix, G. Muller, *Improving the security of infrastructure software using Coccinelle*, *Ercim News*, vol 83 p.54, October 2010.
- [O2] E. Eide, G. Muller, O. Spinczyk, *Report on 5th workshop on programming languages and operating systems (PLOS)*, *Operating System Review*, 43:4 p.31–34, 2009.
- [O3] W. Maldonado, P. Marlier, P. Felber, J. L. Lawall, G. Muller, Transaction Activation: Scheduling Support for Transactional Memory, in : *Journées INRIA Multicoeur, Rapport de recherche INRIA No 6807*, Rocquencourt, February 2009.
- [O4] F. Armand, J. Berniolles, J. L. Lawall, G. Muller, Automating the Porting of Linux to the VirtualLogix Hypervisor using Semantic Patches, in : *Embedded Real Time Software 2008 (ERTS 2008)*, Toulouse, janvier 2008.
- [O5] Y. Padioleau, J. L. Lawall, G. Muller, Semantic Patches, Documenting and Automating Collateral Evolutions in Linux Device Drivers, in : *Ottawa Linux Symposium (OLS 2007)*, Ottawa, Canada, juin 2007.
- [O6] R. Urquela, G. Muller, J. Lawall, Towards Class-Based Dynamic Voltage Scaling for Multimedia Applications, in : *Power-aware Computing Systems*, L. Benini, N. Chang, U. Kremer, C. W. Probst (éd.), *Dagstuhl Seminar Proceedings*, 07041, Internationales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany, 2007.
- [O7] G. Muller, Y. Padioleau, J. L. Lawall, R. R. Hansen, Position paper: Semantic Patches Considered Helpful, in : *ACM SIGOPS Operating Systems Review*, 2006.
- [O8] J.-P. BODEVEIX, M. FILALI, J. LAWALL, G. MULLER, « Vérification automatique de propriétés d'ordonnanceurs Bossa Â », in : *Approches Formelles dans l'Assistance au Développement de Logiciels*, p. 95–109, Paris, France, mars 2006.
- [O9] M. Ségura-Devillechaise, J.-M. Menaud, J. Lawall, G. Muller, Extensibilité dynamique dans les caches web : une approche par aspects, in : *3ème Conférence Française sur les Systèmes d'Exploitation (CFSE'03)*, p. 477–487, La Colle sur Loup, octobre 2003.

- [O10] F. Mérillon, L. Réveillère, C. Consel, R. Marlet, and G. Muller. Devil : un IDL pour les contrôleurs de périphériques. In *Actes de la seconde conférence française sur les systèmes d'exploitation (CFSE'2)*, Paris, France, april 2001.
- [O11] J. Lawall and G. Muller. Faster run-time specialized code using data specialization. Research report 3833, INRIA, Rennes, France, 1999.
- [O12] U. Schultz, J. Lawall, C. Consel, and G. Muller. Specialization patterns. Research report 1242, IRISA, Rennes, France, 1999.
- [O13] G. Muller. Les langages dédiés: une approche sûre et efficace à la conception de systèmes d'exploitation. In *Première conférence française sur les systèmes d'exploitation (CFSE1)*, p. 44-51, Rennes, June 1999.
- [O14] C. Consel et G. Muller. Conception de programmes et systèmes adaptatifs : avant-projet COMPOSE.
- [O15] E.N. Volanschi, G. Muller, C. Consel, L. Hornof, J. Noyé, et C. Pu. A uniform automatic approach to copy elimination in system extensions via program specialization. Rapport de recherche 2903, Inria, Rennes, France, 1996.
- [O16] L. Amsaleg, G. Muller, I. Puaut, et X. Rousset de Pina. Experience with building distributed systems on top of the Mach microkernel. In *Proceedings of Esprit Basic Research Project 6360, Broadcast, third Year Report*, volume 1, Grenoble, 1995.
- [O17] M. Banâtre et G. Muller. Proposition d'une architecture pour l'expérimentation de systèmes distribués extensibles. Rapport de recherche 2506, INRIA, 1994.
- [O18] J.P. Banâtre, M. Banâtre, et G. Muller. An active stable storage and its integration in a multiprocessor architecture. Rapport de recherche 693, INRIA, 1987.

PhD and Habilitation Thesis

- [T1] G. Muller. *Contribution to the Design of Adaptive and Extensible Operating Systems: from Microkernel to Partial Evaluation*. Habilitation à diriger des recherches, Université de Rennes 1, Octobre 1997.
- [T2] G. Muller. *The Design and Building of a Reliable Multiprocessor Architecture*. Thèse de doctorat, Université de Rennes 1, June 1988.

Patents

- [P1] C. Consel, G. Muller, U. Schultz, L. Clausen, and C. Goire. Procédé de compactage d'un programme de type code objet intermédiaire exécutable dans un système embarqué. Brevet d'invention, 1998.
- [P2] M. Banâtre, P. Joubert, T. Leconte, G. Muller, et B. Rochat. Système informatique à transparence de panne pour les applications utilisateur. Brevet d'invention 96 02028, February 19th 1996.
- [P3] J.P. Banâtre, M. Banâtre, et G. Muller. Dispositif électronique formant mémoire stable rapide perfectionnée. Brevet d'invention 35 18437, December 12th 1985.

Software

- [S1] C. Consel, J. Lawall, U. Schultz et G. Muller. JSPEC, un spécialiseur pour programmes Java.
- [S2] C. Consel, R. Marlet et G. Muller. TEMPO, un spécialiseur pour programmes C. IDDN.FR.001.100003.02.R.P.1998.000.10600.
- [S3] G. Muller et N. Peyrouze. FT-NFS, un serveur de fichiers NFS tolérant les fautes. IDDN.FR.001.290005.00.R.P.1997.000.10000.
- [S4] G. Muller, F. Bellard, B. Moura et C. Consel. Salsa/Harissa, un compilateur de code intermédiaire Java vers C. IDDN.FR.001.080011.00.R.C.1997.000.10400.