Bibliography of papers on PEPA

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Abstract

This is a bibliography of papers, articles and books on the use and development of Performance Evaluation Process Algebra (PEPA). Many of the papers listed here are available from the PEPA Web Page at `http://www.dcs.ed.ac.uk/pepa/`. Please send updates or corrections to this list to Stephen Gilmore ⟨stg@dcs.ed.ac.uk⟩.

References

[1] J. Hillston. *A Compositional Approach to Performance Modelling.* Cambridge University Press, 1996.

[2] S. Gilmore and J. Hillston. The PEPA Workbench: A Tool to Support a Process Algebra-based Approach to Performance Modelling. In *Proceedings of the Seventh International Conference on Modelling Techniques and Tools for Computer Performance Evaluation*, number 794 in Lecture Notes in Computer Science, pages 353–368, Vienna, May 1994. Springer-Verlag.

[3] J. Hillston. The nature of synchronisation. In Herzog and Rettelbach [138], pages 51–70.

[4] J. Hillston. Compositional Markovian modelling using a process algebra. In W. Stewart, editor, *Proceedings of the Second International Workshop on Numerical Solution of Markov Chains: Computations with Markov Chains*, Raleigh, North Carolina, January 1995. Kluwer Academic Press.

[5] J. Hillston and V. Mertsiotakis. A simple time scale decomposition technique for stochastic process algebras. In Gilmore and Hillston [139], pages 566–577.

[6] P. Harrison and J. Hillston. Exploiting quasi-reversible structures in Markovian process algebra models. In Gilmore and Hillston [139], pages 510–520.

[7] M. Ribaudo. On the aggregation techniques in stochastic Petri nets and stochastic process algebras. In Gilmore and Hillston [139], pages 600–611.

[8] D.R.W. Holton. A PEPA specification of an industrial production cell. In Gilmore and Hillston [139], pages 542–551.

[9] S. Donatelli, J. Hillston, and M. Ribaudo. A comparison of Performance Evaluation Process Algebra and Generalized Stochastic Petri Nets. In *Proc. 6th International Workshop on Petri Nets and Performance Models*, Durham, North Carolina, 1995.

[10] M. Ribaudo. Stochastic Petri net semantics for stochastic process algebras. In *Proc. 6th International Workshop on Petri Nets and Performance Models*, Durham, North Carolina, 1995.

[11] S. Gilmore, J. Hillston, D.R.W. Holton, and M. Rettelbach. Specifications in Stochastic Process Algebra for a Robot Control Problem. *International Journal of Production Research*, 34(4):1065–1080, 1996.

[12] M. Kwiatkowska and G. Norman. Metric denotational semantics for PEPA. In M. Ribaudo, editor, *Proceedings of the Fourth Annual Workshop on Process Algebra and Performance Modelling*, pages 120–138. Dipartimento di Informatica, Università di Torino, CLUT, July 1996.

[13] G. Clark. Formalising the specification of rewards with PEPA. In Ribaudo [140], pages 139–160.

[14] S. Gilmore, J. Hillston, and D.R.W. Holton. From SPA models to programs. In Ribaudo [140], pages 179–198.

[15] G. Clark. An extended weak isomorphism for model simplification. In Brinksma and Nymeyer [141]. Centre for Telematics and Information Technology, Technical report number 97-14.

[16] S. Gilmore and J. Hillston. Refining internal choice in PEPA models. In Pooley and Hillston [146], pages 49–64.

[17] G. Clark and J. Hillston. Towards automatic derivation of performance measures from PEPA models. In Pooley and Hillston [146], pages 65–81.

[18] A. El-Rayes, M. Kwiatkowska, and S. Minton. Analysing performance of lift systems in PEPA. In R. Pooley and J. Hillston, editors, *Proceedings of the Twelfth UK Performance Engineering Workshop*, pages 83–100, Edinburgh, Scotland, September 1996.

[19] D.R.W. Holton and J.P.N. Glover. An SPA performance model of a production cell. In D. Kouvatsos, editor, *Proceedings of the Thirteenth UK Performance Engineering Workshop*, pages 6/1–6/6, Bradford, 1997.

[20] N. Thomas and J. Hillston. Using Markovian process algebra to specify interactions in queueing systems. Technical Report ECS-LFCS-97-373, Laboratory for Foundations of Computer Science, Department of Computer Science, The University of Edinburgh, 1997.

[21] S. Gilmore, J. Hillston, and L. Recalde. Elementary structural analysis for PEPA. Technical Report ECS-LFCS-97-377, Laboratory for Foundations of Computer Science, Department of Computer Science, The University of Edinburgh, 1997.

[22] J. Hillston and M. Ribaudo. Stochastic process algebras: a new approach to performance modeling. In K. Bagchi and G. Zobrist, editors, *Modeling and Simulation of Advanced Computer Systems*. Gordon Breach, 1998.

[23] J. Hillston. A class of PEPA models exhibiting product form solution over submodels. Technical Report ECS-LFCS-98-382, Laboratory for Foundations of Computer Science, Department of Computer Science, The University of Edinburgh, February 1998.

[24] G. Clark, S. Gilmore, J. Hillston, and N. Thomas. Experiences with the PEPA performance modelling tools. *IEE Proceedings—Software*, 146(1):11–19, February 1999. Special issue of papers from the Fourteenth UK PEW.

[25] J. Hillston and N. Thomas. Product Form Solution for a class of PEPA Models. In *Proceedings of IEEE International Computer Performance and Dependability Symposium*, Durham, NC, September 1998. Extended version in *Performance Evaluation*, **35**(3–4), 1999).

[26] J. Hillston and N. Thomas. Product form solution for a class of PEPA models. *Performance Evaluation*, 35(3–4):171–192, 1999.

[27] J. Hillston. Exploiting structure in solution: Decomposing composed models. In Priami [142], pages 1–15.

[28] S. Gilmore and J. Hillston. Feature interaction in PEPA. In Priami [142], pages 17–26.

[29] N. Thomas and S. Gilmore. Applying quasi-separability to Markovian process algebra. In Priami [142], pages 27–36.

[30] J. Hillston and N. Thomas. A syntactical analysis of reversible PEPA models. In Priami [142], pages 37–49.

[31] E. W. Dempster, N. T. Tomov, J. Lu, C. S. Pua, M. H. Williams, A. Burger, H. Taylor, and P. Broughton. Verifying a performance estimator for parallel DBMSs. In *Proceedings of EuroPar 1998*, September 1998.

[32] H. Bowman, J. Bryans, and J. Derrick. Analysis of a multimedia stream using stochastic process algebra. In C. Priami, editor, *Sixth International Workshop on Process Algebras and Performance Modelling*, pages 51–69, Nice, September 1998.

[33] G. Clark, S. Gilmore, and J. Hillston. Specifying performance measures for PEPA. In J.-P. Katoen, editor, *Proceedings of the Fifth International AMAST Workshop on Real-Time and Probabilistic Systems*, number 1601 in LNCS, pages 211–227, Bamberg, Germany, May 1999. Springer-Verlag.

[34] S. Gilmore and J. Hillston. A feature construct for PEPA. In Davies and Bradley [147], pages 225–236.

[35] G. Clark, S. Gilmore, and J. Hillston. The PEPA performance modelling tools. In Hillston [143].

[36] G. Clark. Stochastic process algebra structure for insensitivity. In Hillston [143], pages 63–82.

[37] R. Pooley. Using UML to derive stochastic process algebra models. In Davies and Bradley [147], pages 23–33.

[38] N. Thomas. Extending quasi-separability. In Davies and Bradley [147], pages 131–142.

[39] P.R. Mitton and D.R.W. Holton. Extensions to PEPA to simplify the creation of component libraries. In Davies and Bradley [147], pages 209–218.

[40] G. Clark. *Techniques for the Construction and Analysis of Algebraic Performance Models*. PhD thesis, The University of Edinburgh, 2000.

[41] G. Clark, S. Gilmore, J. Hillston, and M. Ribaudo. Exploiting modal logic to express performance measures. In B.R. Haverkort, H.C. Bohnenkamp, and C.U. Smith, editors, *Computer Performance Evaluation: Modelling Techniques and Tools, Proceedings of the 11th International Conference*, number 1786 in LNCS, pages 211–227, Schaumburg, Illinois, USA, March 2000. Springer-Verlag.

[42] J. Hunter. Re-evaluation of the PEPA Workbench. Master's thesis, School of Computer Science, The University of Edinburgh, September 1999.

[43] J. Tomasik and J. Hillston. Transforming PEPA models to obtain product form bounds. Technical Report EDI-INF-RR-0009, Laboratory for Foundations of Computer Science, The University of Edinburgh, February 2000.

[44] J. Hillston and J. Tomasik. Amalgamation of transition sequences in the PEPA formalism. Technical Report EDI-INF-RR-0013, Laboratory for Foundations of Computer Science, The University of Edinburgh, March 2000.

[45] L. Console, C. Picardi, and M. Ribaudo. Diagnosis and Diagnosability Analysis using Process Algebras. In *Proc. of 11th Int. Workshop on Principles of Diagnosis (DX00)*, Morelia, Mexico, June 2000.

[46] L. Console, C. Picardi, and M. Ribaudo. Diagnosis and Diagnosability Analysis using PEPA. In *Proc. of 14th European Conference on Artificial Intelligence*, Berlin, August 2000.

[47] P. Mitton and R. Holton. PEPA performability modelling using UML statecharts. In Thomas and Bradley [148], pages 19–33.

[48] S. Gilmore and J. Hillston. Performance modelling in PEPA with higher-order functions. In Thomas and Bradley [148], pages 35–46.

[49] N. Thomas, M. Munro, P. King, and R. Pooley. Visualisation for model comprehension. In Thomas and Bradley [148], pages 47–58.

[50] J. Bradley and N. Thomas. Constructing a partial order for performance measures. In Thomas and Bradley [148], pages 177–186.

[51] J. Hillston and J. Tomasik. Amalgamation of transition sequences in the PEPA formalism. In Gorrieri et al. [144], pages 523–534.

[52] N. Thomas, M. Munro, P. King, and R. Pooley. Visual representation of stochastic process algebra models. In *Proceedings on the second international Workshop on Software and Performance (WoSP)*, pages 18–19, Ottawa, Canada, September 2000. ACM.

[53] F. Wan. Interface engineering and transient analysis for the PEPA Workbench. Master's thesis, School of Computer Science, The University of Edinburgh, September 2000.

[54] S. Gilmore and J. Hillston. *The PEPA Feature Construct*, pages 125–142. Springer-Verlag, 2001.

[55] J. Hillston. *FMPA Lecture Notes*, chapter Exploiting Structure in Solution: Decomposing Composed Models. Springer-Verlag, 2001.

[56] *PEPA: a stochastic progress algebra formalism*, University of Illinois at Urbana-Champaign, October 2000.

[57] J. Hillston and L. Kloul. Performance investigation of an on-line auction system. *Concurrency and Computation: Practice and Experience*, 13:23–41, 2001.

[58] S. Gilmore, J. Hillston, and M. Ribaudo. An efficient algorithm for aggregating PEPA models. *IEEE Transactions on Software Engineering*, 27(5):449–464, May 2001.

[59] N. Thomas and J. Bradley. Towards reliable software performance modelling using stochastic process algebra. Technical Report 01-01, University of Durham, 2001. January.

[60] J. Hillston, L. Recalde, M. Ribaudo, and M. Silva. A comparison of the expressiveness of SPA and bounded SPN models. In B. Haverkort and R. German, editors, *Proceedings of the 9th International Workshop on Petri Nets and Performance Models*, Aachen, Germany, September 2001. IEEE Computer Science Press.

[61] N. Thomas and J. Bradley. Terminating processes in PEPA. In Djemame and Kara [149], pages 143–154.

[62] S. Gilmore, J. Hillston, and M. Ribaudo. PEPA-coloured stochastic Petri nets. In Djemame and Kara [149], pages 155–166.

[63] J. Hillston and L. Kloul. An efficient Kronecker representation for PEPA models. In de Alfaro and Gilmore [145], pages 120–135.

[64] G. Clark and W.H. Sanders. Implementing a stochastic process algebra within the Möbius modeling framework. In de Alfaro and Gilmore [145], pages 200–215.

[65] F. Stathopoulos. Enhancing the PEPA Workbench with simulation and experimentation facilities. Master's thesis, School of Computer Science, The University of Edinburgh, September 2001.

[66] James Edwards. Process algebras for protocol validation and analysis. In *Proceedings of PREP 2001*, pages 1–20, Keele, April 2001. EPSRC.

[67] S. Gilmore, J. Hillston, and M. Ribaudo. PEPA nets: A structured performance modelling formalism. In T. Field, P.G. Harrison, J. Bradley, and U. Harder, editors, *Proceedings of the 12th International Conference on Modelling Tools and Techniques for Computer and Communication System Performance Evaluation*, number 2324 in Lecture Notes in Computer Science, pages 111–130, London, UK, April 2002. Springer-Verlag.

[68] N. Thomas. Behavioural independence and control in PEPA. In S. Gilmore and J. Hillston, editors, *Proceedings of the workshop on Process Algebras and Stochastically Timed Activities*, pages 46–56, Edinburgh, Scotland, June 2002.

[69] K. Powell. Rapid prototyping of high-performance concurrent Java applications. Master's thesis, School of Computer Science, The University of Edinburgh, September 2002.

[70] J.M. Forneau, L. Kloul, and F. Valois. Performance modelling of hierarchical cellular networks using PEPA. *Performance Evaluation*, 50(2–3):83–99, November 2002.

[71] G. Clark and J. Hillston. Product form solution for an insensitive stochastic process algebra structure. *Performance Evaluation*, 50(2–3):129–151, November 2002.

[72] Stephen Gilmore, Zully Grant-Duff, Peter Harrison, and Jane Hillston. Systematic transformations to find quasi-reversible structures in PEPA models. In *Proceedings of the Workshop on Process Algebra and Stochastically Timed Activities (PASTA 2002)*, pages 1–16, Edinburgh, June 2002.

[73] Nigel Thomas, Jeremy Bradley, and David Thornley. An approximate solution of PEPA models using substitution. *IEE Proceedings - Computers and Digital Techniques*, 150(2):67–74, March 2003.

[74] J. Bradley, N. Dingle, S. Gilmore, and W. Knottenbelt. Extracting passage times from PEPA models with the HYDRA tool: A case study. In Jarvis [150], pages 79–90.

[75] J. Hillston, L. Kloul, and A. Mokhtari. Active nodes performance analysis using PEPA. In Jarvis [150], pages 244–256.

[76] J.T. Bradley, N.J. Dingle, S.T. Gilmore, and W.J. Knottenbelt. Derivation of passage-time densities in PEPA models using IPC: The Imperial PEPA Compiler. In G Kotsis, editor, *Proceedings of the 11th IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunications Systems*, pages 344–351, University of Central Florida, October 2003. IEEE Computer Society Press.

[77] S. Gilmore and L. Kloul. A unified tool for performance modelling and prediction. In B. Littlewood S. Anderson and M. Felici, editors, *Proceedings of the 22nd International Conference on Computer Safety, Reliability and Security (SAFECOMP 2003)*, volume 2788 of *LNCS*, pages 179–192. Springer-Verlag, 2003.

[78] S. Gilmore, J. Hillston, M. Ribaudo, and L. Kloul. PEPA nets: A structured performance modelling formalism. *Performance Evaluation*, 54(2):79–104, October 2003.

[79] L. Brodo, P. Degano, S. Gilmore, J. Hillston, and C. Priami. Performance evaluation for global computation. In C. Priami, editor, *Global Computing: Programming environments, languages, security, and analysis of systems. Proceedings of the IST/FET International Workshop (GC 2003)*, volume 2874 of *LNCS*, pages 229–253, Rovereto, Italy, February 2003. Springer-Verlag.

[80] S. Gilmore, J. Hillston, L. Kloul, and M. Ribaudo. Software performance modelling using PEPA nets. In *Proceedings of the Fourth International Workshop on Software and Performance*, pages 13–24, Redwood Shores, California, USA, January 2004. ACM Press.

[81] A. Argent-Katwala, J.T. Bradley, and N.J. Dingle. Expressing performance requirements using regular expressions to specify stochastic probes over process algebra models. In *Proceedings of the Fourth International Workshop on Software and Performance*, pages 49–58, Redwood Shores, California, USA, January 2004. ACM Press.

[82] L. Kloul. PEPA: Une approche formelle pour la modélisation des performances, January 2004. Invited seminar at Laboratoire CITI, INSA Lyon.

[83] S. Gilmore, J. Hillston, and L. Kloul. PEPA nets. In M.C. Calzarossa and E. Gelenbe, editors, *Performance Tools and Applications to Networked Systems: Revised Tutorial Lectures*, number 2965 in Lecture Notes in Computer Science, pages 311–335. Springer-Verlag, 2004.

[84] Mikael Buchholtz, Stephen Gilmore, Jane Hillston, and Flemming Nielson. Securing statically-verified communications protocols against timing attacks. In J. Bradley and W. Knottenbelt, editors, *Proceedings of the First International Workshop on Practical Applications of Stochastic Modelling*, pages 61–79, London, England, September 2004.

[85] Mikael Buchholtz, Stephen Gilmore, Jane Hillston, and Flemming Nielson. Securing statically-verified communications protocols against timing attacks. *Electr. Notes Theor. Comput. Sci.*, 128(4):123–143, 2005.

[86] Muffy Calder, Stephen Gilmore, and Jane Hillston. Modelling the influence of RKIP on the ERK signalling pathway using the stochastic process algebra PEPA. In Anna Ingolfsdottir and Hanne Riis Nielson, editors, *Proceedings of the BioConcur Workshop on Concurrent Models in Molecular Biology*, London, England, August 2004.

[87] Bryce Mitchell and Jane Hillston. Analysing web service composition with PEPA. In J. Bradley, editor, *Proceedings of the Third Workshop on Process Algebras and Stochastically Timed Activities*, pages 33–44, Edinburgh, Scotland, June 2004.

[88] Jeremy T. Bradley, Stephen T. Gilmore, and Nigel Thomas. How synchronisation strategy approximation in PEPA implementations affects passage time performance results. In M. Núñez *et al*, editor, *Applying Formal Methods: Testing, Performance, and M/E-Commerce (EPEW 2004)*, volume 3236 of *LNCS*, pages 128–142. Springer-Verlag, October 2004.

[89] Stephen Gilmore, Valentin Haenel, Jane Hillston, and Leïla Kloul. PEPA nets in practice: Modelling a decentralised peer-to-peer emergency medial application. In M. Núñez *et al*, editor, *Applying Formal Methods: Testing, Performance, and M/E-Commerce (EPEW 2004)*, volume 3236 of *LNCS*, pages 262–277. Springer-Verlag, October 2004.

[90] J. Hillston and M. Ribaudo. Modelling mobility with PEPA nets. In *Proceedings of the 19th International Symposium on Computer and Information Sciences (ISCIS 2004)*, volume 3280 of *LNCS*, pages 513–522, Kemer-Antalya, Turkey, October 2004. Springer-Verlag.

[91] S. Gilmore, L. Kloul, and D. Piazza. Modelling role-playing games using PEPA nets. In *Proceedings of the 19th International Symposium on Computer and Information Sciences (ISCIS 2004)*, volume 3280 of *LNCS*, pages 523–532, Kemer-Antalya, Turkey, October 2004. Springer-Verlag.

[92] Jane Hillston, Leïla Kloul, and Amdjed Mokhtari. Towards a feasible active networking scenario. *Telecommunication Systems*, 27(2–4):413–438, October 2004.

[93] Adam Duguid. Modelling BitTorrent in PEPA, March 2005. School of Informatics Undergraduate Dissertation.

[94] Anthony Rinaldi. A visual debugger for the PEPA Workbench, March 2005. School of Informatics Undergraduate Dissertation.

[95] Muffy Calder, Stephen Gilmore, and Jane Hillston. Automatically deriving ODEs from process algebra models of signalling pathways. In Gordon Plotkin, editor, *Proceedings of Computational Methods in Systems Biology (CMSB 2005)*, pages 204–215, Edinburgh, Scotland, April 2005.

[96] J. Hillston. Tuning systems: From composition to performance. *The Computer Journal*, 48(4):385–400, May 2005. The Needham Lecture paper.

[97] J. Hillston. Process algebras for quantitative analysis. In *Proceedings of the 20th Annual IEEE Symposium on Logic in Computer Science (LICS' 05)*, pages 239–248, Chicago, June 2005. IEEE Computer Society Press.

[98] Mikael Buchholtz, Stephen Gilmore, Valentin Haenel, and Carlo Montangero. End-to-end integrated security and performance analysis on the DEGAS Choreographer platform. In I.J. Hayes J.S. Fitzgerald and A. Tarlecki, editors, *Proceedings of the International Symposium of Formal Methods Europe (FM 2005)*, number 3582 in LNCS, pages 286–301. Springer-Verlag, June 2005.

[99] J. Hillston. Fluid flow approximation of PEPA models. In *Proceedings of the Second International Conference on the Quantitative Evaluation of Systems*, pages 33–43, Torino, Italy, September 2005. IEEE Computer Society Press.

[100] Jean-Michel Fourneau and Leïla Kloul. A precedence PEPA model for performance and reliability analysis. In András Horváth and Miklós Telek, editors, *Formal Methods and Stochastic Models for Performance Evaluation: Third European Performance Engineering Workshop (EPEW 2006)*, number 4054 in LNCS, pages 1–15. Springer-Verlag, June 2006.

[101] Jane Hillston and Leïla Kloul. A function-equivalent components based simplification technique for PEPA models. In András Horváth and Miklós Telek, editors, *Formal Methods and Stochastic Models for Performance Evaluation: Third European Performance Engineering Workshop (EPEW 2006)*, number 4054 in LNCS, pages 16–30. Springer-Verlag, June 2006.

[102] Ashok Argent-Katwala and Jeremy T. Bradley. Functional performance specification with stochastic probes. In András Horváth and Miklós Telek, editors, *Formal Methods and Stochastic Models for Performance Evaluation: Third European Performance Engineering Workshop (EPEW 2006)*, number 4054 in LNCS, pages 31–46. Springer-Verlag, June 2006.

[103] Allan Clark and Stephen Gilmore. Evaluating quality of service for service level agreements. In Luboš Brim and Martin Leucker, editors, *Proceedings of the 11th International Workshop on Formal Methods for Industrial Critical Systems*, pages 172–185, Bonn, Germany, August 2006.

[104] Adam Duguid. Coping with the parallelism of BitTorrent: Conversion of PEPA to ODEs in dealing with state space explosion. In Eugene Asarin and Patricia Bouyer, editors, *Formal Modeling and Analysis of Timed Systems, 4th International Conference, FORMATS 2006, Paris, France, September 25-27, 2006, Proceedings*, volume 4202 of *Lecture Notes in Computer Science*, pages 156–170. Springer, 2006.

[105] Stephen Gilmore and Mirco Tribastone. Evaluating the scalability of a web service-based distributed e-learning and course management system. In Mario Bravetti, Manuel T. Núñez, and Gianluigi Zavattaro, editors, *Third International Workshop on Web Services and Formal Methods (WS-FM'06)*, volume 4184 of *Lecture Notes in Computer Science*, pages 156–170, Vienna, Austria, 2006. Springer.

[106] Muffy Calder, Adam Duguid, Stephen Gilmore, and Jane Hillston. Stronger computational modelling of signalling pathways using both continuous and discrete-state methods. In Corrado Priami, editor, *Proceedings of the Fourth International Conference on Computational Methods in Systems Biology (CMSB 2006)*, volume 4210 of *Lecture Notes in Computer Science*, pages 63–77, Trento, Italy, 2006. Springer.

[107] Muffy Calder, Stephen Gilmore, and Jane Hillston. Modelling the influence of RKIP on the ERK signalling pathway using the stochastic process algebra PEPA. In *Transactions on Computational Systems Biology VII*, number 4230 in LNCS. Springer, 1–23 2006.

[108] Marco Stenico. Modelling molecular systems with discrete concentration levels in the context of the process algebra PEPA: Stochastic and deterministic interpretations. Master's thesis, Università degli Studi di Trento, 2006. Corso di Laurea in Informatica Specialistica thesis.

[109] T. Razafindralambo and F. Valois. Performance evaluation of backoff algorithms in 802.11 ad-hoc networks. In *PE-WASUN '06: Proceedings of the 3rd ACM international workshop on Performance evaluation of wireless ad hoc, sensor and ubiquitous networks*, pages 82–89, New York, NY, USA, 2006. ACM Press.

[110] T. Razafindralambo and F. Valois. Stochastic behavior study of backoff algorithms in case of hidden terminals. In *Proceedings of the 17th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'06)*, pages 1–6. IEEE Press, 2006.

[111] J. Hillston and L. Kloul. Formal techniques for performance analysis: blending SAN and PEPA. *Formal Aspects of Computing*, 19(1):3–33, 2007.

[112] Allan Clark, Stephen Gilmore, Jane Hillston, and Mirco Tribastone. *Formal Methods for Performance Evaluation: the 7th International School on Formal Methods for the Design of Computer, Communication, and Software Systems, SFM 2007*, volume 4486, chapter Stochastic Process Algebras, pages 132–179. Springer-Verlag, Bertinoro, Italy, May–June 2007.

[113] Mirco Tribastone. The PEPA Plug-in Project. In Mor Harchol-Balter, Marta Kwiatkowska, and Miklos Telek, editors, *Proceedings of the 4th International Conference on the Quantitative Evaluation of SysTems (QEST)*, pages 53–54. IEEE, September 2007.

[114] Allan Clark. The ipclib PEPA Library. In Mor Harchol-Balter, Marta Kwiatkowska, and Miklos Telek, editors, *Proceedings of the 4th International Conference on the Quantitative Evaluation of SysTems (QEST)*, pages 55–56. IEEE, September 2007.

[115] Richard Hayden and Jeremy Bradley. Fluid semantics for passive stochastic process algebra cooperation. In *VALUETOOLS'08, 3rd International Conference on Performance Evaluation Methodologies and Tools*, October 2008.

[116] Mario Bravetti, Stephen Gilmore, Claudio Guidi, and Mirco Tribastone. Replicating web services for scalability. In G. Barthe and C. Fournet, editors, *Proceedings of the Third International Conference on Trustworthy Global Computing (TGC'07)*, volume 4912 of *LNCS*, pages 204–221. Springer-Verlag, 2008.

[117] Ashok Argent-Katwala, Jeremy Bradley, Allan Clark, and Stephen Gilmore. Location-aware quality of service measurements for service-level agreements. In G. Barthe and C. Fournet, editors, *Proceedings of the Third International Conference on Trustworthy Global Computing (TGC'07)*, volume 4912 of *LNCS*, pages 222–239. Springer-Verlag, 2008.

[118] Hao Wang, Dave Laurenson, and Jane Hillston. PEPA Analysis of MAP Effects in Hierarchical Mobile IPv6. In *Proceedings of the 15th Annual Meeting of the IEEE International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2007)*, Istanbul, Turkey, October 2007. IEEE Computer Society Press.

[119] Luca Gerosa. Stochastic process algebras as design and analysis framework for synthetic biology modelling. Master's thesis, University of Trento, 2007.

[120] Jie Ding, Jane Hillston, and Dave Laurenson. Performance modelling of content adaptation for a personal distributed environment. *Personal Wireless Communication*, November 2007. doi 10.1007/s11277-007-9427-4.

[121] Hao Wang, Dave Laurenson, and Jane Hillston. Evaluation of RSVP and Mobility-aware RSVP Using Performance Evaluation Process Algebra. In *Proceedings of the IEEE International Conference on Communications (ICC 2008)*, Beijing, China, May 2008. To appear.

[122] Paul McEwan. A Visual Single-Step Navigator for the Eclipse PEPA Plug-in. Undergraduate 4th Year Project Report, March 2008.

[123] Ashok Argent-Katwala, Allan Clark, Howard Foster, Stephen Gilmore, Philip Mayer, and Mirco Tribastone. Safety and response-time analysis of an automotive accident assistance service. In *Proceedings of the 3rd International Symposium on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2008)*, number 17 in Communications in Computer and Information Science (CCIS), pages 191–205, Porto Sani, Greece, October 2008. Springer-Verlag.

[124] Mirco Tribastone and Stephen Gilmore. Automatic extraction of PEPA performance models from UML activity diagrams annotated with the MARTE profile. In *Proceedings of the 7th International Workshop on Software and Performance (WOSP2008)*, pages 67–78, Princeton NJ, USA, 2008. ACM Press.

[125] Mirco Tribastone and Stephen Gilmore. Automatic translation of UML sequence diagrams into PEPA models. In *5th International Conference on the Quantitative Evaluation of SysTems (QEST 2008)*, pages 205–214, St Malo, France, 2008. IEEE Computer Society Press.

[126] Allan Clark and Stephen Gilmore. State-aware performance analysis with eXtended Stochastic Probes. In Nigel Thomas and Carlos Juiz, editors, *Proceedings of the 5th European Performance Engineering Workshop (EPEW 2008)*, volume 5261 of *LNCS*, pages 125–140, Palma de Mallorca, Spain, September 2008. Springer.

[127] Allan Clark, Adam Duguid, Stephen Gilmore, and Mirco Tribastone. Partial evaluation of PEPA models for fluid-flow analysis. In Nigel Thomas and Carlos Juiz, editors, *Proceedings of the 5th European Performance Engineering Workshop (EPEW 2008)*, volume 5261 of *LNCS*, pages 2–16, Palma de Mallorca, Spain, September 2008. Springer.

[128] Lamia Djoudi and Leïla Kloul. Assembly code analysis using stochastic process algebra. In Nigel Thomas and Carlos Juiz, editors, *Proceedings of the 5th European Performance Engineering Workshop (EPEW 2008)*, volume 5261 of *LNCS*, pages 95–109, Palma de Mallorca, Spain, September 2008. Springer.

[129] Vashti Galpin. Continuous approximation of PEPA models and Petri nets. In *Proceedings of the European Simulation and Modelling Conference (ESM 2008)*, pages 492–499, Le Havre, France, 27-29 October 2008.

[130] A. Clark and S. Gilmore. Terminating passage-time calculations on uniformised Markov chains. In Ashok Argent-Katwala, Nicholas J. Dingle, and Uli Harder, editors, *Proceedings of the Twenty-Fourth annual UK Performance Engineering Workshop*, pages 64–75, June 2008.

[131] Nil Geisweiller, Jane Hillston, and Marco Stenico. Relating continuous and discrete PEPA models of signalling pathways. *Theor. Comput. Sci.*, 404(1-2):97–111, 2008.

[132] Yishi Zhao and Nigel Thomas. Approximate solution of a PEPA model of a key distribution centre. In Samuel Kounev, Ian Gorton, and Kai Sachs, editors, *Performance Evaluation: Metrics, Models and Benchmarks, SPEC International Performance Evaluation Workshop, SIPEW 2008, Darmstadt, Germany, June 27-28, 2008. Proceedings*, volume 5119 of *Lecture Notes in Computer Science*, pages 44–57. Springer, 2008.

[133] Jeremy T. Bradley, Stephen Gilmore, and Jane Hillston. Analysing distributed Internet worm attacks using continuous state-space approximation of process algebra models. *J. Comput. Syst. Sci.*, 74(6):1013–1032, 2008.

[134] M. Tribastone, A. Duguid, and S. Gilmore. The PEPA Eclipse Plug-in. *Performance Evaluation Review*, 36(4):28–33, March 2009.

[135] Allan Clark and Stephen Gilmore. Transformations in PEPA Models and Stochastic Probe Placement. In Karim Djemame, editor, *Proceedings of the Twenty-Fifth UK Performance Engineering Workshop*, pages 1–16, Leeds University, July 2009.

[136] Allan Clark, Adam Duguid, and Stephen Gilmore. Passage-end analysis. In Jeremy T. Bradley, editor, *Computer Performance Engineering, 6th European Performance Engineering Workshop, EPEW 2009, London, UK, July 9-10, 2009, Proceedings*, volume 5652 of *Lecture Notes in Computer Science*, pages 110–115. Springer, 2009.

[137] Muffy Calder, Stephen Gilmore, Jane Hillston, and Vladislav Vyshemirsky. Formal methods for biochemical signalling pathways. In Jonathan P.; Siddiqi Jawed I Boca, Paul P.; Bowen, editor, *Formal Methods: State of the Art and New Directions*. Springer, 2009. To appear October 2009.

[138] U. Herzog and M. Rettelbach, editors. *Proceedings of the Second International Workshop on Process Algebras and Performance Modelling*, Erlangen, November 1994.

[139] S. Gilmore and J. Hillston, editors. *Proceedings of the Third International Workshop on Process Algebras and Performance Modelling*. Special Issue of *The Computer Journal*, 38(7), December 1995.

[140] M. Ribaudo, editor. *Proceedings of the Fourth Annual Workshop on Process Algebra and Performance Modelling*. Dipartimento di Informatica, Università di Torino, CLUT, July 1996.

[141] E. Brinksma and A. Nymeyer, editors. *Proceedings of the Fifth Annual Workshop on Process Algebra and Performance Modelling*. University of Twente, June 1997. Centre for Telematics and Information Technology, Technical report number 97-14.

[142] C. Priami, editor. *Proceedings of the Sixth Annual Workshop on Process Algebra and Performance Modelling*, Nice, France, September 1998. Università degli studi di Verona.

[143] J. Hillston, editor. *Proceedings of the Seventh Annual Workshop on Process Algebra and Performance Modelling*, Zaragosa, Spain, September 1999. University of Zaragosa Press.

[144] R. Gorrieri et al., editor. *ICALP Workshops 2000 — Proceedings of the Satellite Workshops of the 27th International Colloquium on Automata, Languages and Programming (Proceedings of the Eighth Annual Workshop on Process Algebra and Performance Modelling)*, number 8 in Proceedings in Informatics, Geneva, Switzerland, September 2000. Carleton Scientific.

[145] L. de Alfaro and S. Gilmore, editors. *Proceedings of the first joint PAPM-PROBMIV Workshop*, volume 2165 of *Lecture Notes in Computer Science*, Aachen, Germany, September 2001. Springer-Verlag.

[146] R. Pooley and J. Hillston, editors. *Proceedings of the Twelfth UK Performance Engineering Workshop*, Department of Computer Science, The University of Edinburgh, September 1996.

[147] N. Davies and J. Bradley, editors. *Proceedings of the Fifteenth UK Performance Engineering Workshop*, The University of Bristol, July 1999.

[148] N. Thomas and J. Bradley, editors. *Proceedings of the Sixteenth UK Performance Engineering Workshop*, University of Durham, July 2000.

[149] K. Djemame and M. Kara, editors. *Proceedings of the Seventeenth UK Performance Engineering Workshop*, University of Leeds, July 2001.

[150] S. Jarvis, editor. *Proceedings of the Ninteenth UK Performance Engineering Workshop*, University of Warwick, July 2003.