

# Curriculum Vitae

Corentin Travers  
LaBRI, 351 cours de la Libération  
33400 Talence, France

(Updated December 2012)

## PERSONAL DATA

---

LaBRI - office 316  
travers@labri.fr  
<http://www.labri.fr/~travers/>

## EDUCATION

---

Ph. D. in Computer Sciences, University of Rennes 1, 2007

M. Sc. in Computer Sciences, University of Rennes 1, 2004

Engineer diploma from Enseirb<sup>1</sup>, 2002

## ACADEMIC APPOINTMENTS

---

Associate professor, LaBRI, Enseirb-Matmeca	Sep. 2010 – present
Postdoctoral researcher, LIP6, University of Paris 6	Oct. 2009 – Aug. 2010
Postdoctoral researcher, Technion, Israel	Oct. 2008 – Sep. 2009
Postdoctoral researcher, Universidad Politécnica de Madrid	Jan. 2008 – Sep. 2008
Research Assistant, University of Rennes 1	Oct. 2004 – Dec. 2007
Teaching Assistant, University of Rennes 1	Oct. 2004 – Dec. 2007

---

1. École National Supérieur d'Électronique, Informatique et Radio-électricité de Bordeaux

## PROGRAM COMMITTEES

---

27th International Symposium on Distributed Computing (DISC 2013)

33rd International Conference on Distributed Computing Systems (ICDCS 2013)

15th French symposium on algorithmic aspects of telecommunication (Algotel 2013)

28th International Conference on Distributed Computing Systems (ICDCS 2008)

Third International Workshop on Reliability, Availability, and Security<sup>2</sup> (WRAS 2010)

## LIST OF PUBLICATIONS

---

### Refereed Journals

- [1] DAN ALISTARH, SETH GILBERT, RACHID GUERAOU, AND CORENTIN TRAVERS. Of choices, failures and asynchrony : The many faces of set agreement. *Algorithmica*, volume 62(1-2) :pages 595–629, 2012.
- [2] DAN ALISTARH, SETH GILBERT, RACHID GUERRAOU, AND CORENTIN TRAVERS. Generating fast indulgent algorithms. *Theory Comput. Syst.*, volume 51(4) :pages 404–424, 2012.
- [3] YEHUDA AFEK, ELI GAFNI, MICHEL RAYNAL, AND CORENTIN TRAVERS. The  $k$ -simultaneous consensus problem. *Distributed Computing*, volume 22(3) :pages 185–195, 2010.
- [4] ACHOUR MOSÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Narrowing power vs efficiency in synchronous set agreement : Relationship, algorithms and lower bounds. *Theoretical Computer Science*, volume 411(1) :pages 58–69, 2010.
- [5] ELI GAFNI, ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. From adaptive renaming to set agreement. *Theoretical Computer Science*, volume 410(14) :pages 1328–1335, 2009.
- [6] PHILIPPE RAÏPIN PARVÉDY, MICHEL RAYNAL, AND CORENTIN TRAVERS. Strongly terminating early-stopping  $k$ -set agreement in synchronous systems with general omission failures. *Theory of Computing Systems*, volume 47(1), 2009.
- [7] ACHOUR MOSTÉFAOUI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. The combined power of conditions and information on failures to solve asynchronous set agreement. *SIAM Journal of Computing*, volume 38(4) :pages 1574–1601, 2008.
- [8] ACHOUR MOSTÉFAOUI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. On the computability power and the robustness of set agreement-oriented failure detector classes. *Distributed Computing*, volume 21(3) :pages 201–222, 2008.
- [9] SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. An impossibility about failure detectors in the iterated immediate snapshot model. *Information Processing Letters*, volume 108(3) :pages 160–164, 2008.

---

2. <http://wras2010.lip6.fr/>

- [10] ACHOUR MOSTÉFAOUI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. From  $\diamond W$  to  $\Omega$  : A simple bounded quiescent reliable broadcast-based transformation. *Journal of Parallel and Distributed Computing*, volume 67(1) :pages 125–129, 2007.
- [11] ACHOUR MOSTÉFAOUI, ERIC MOURGAYA, MICHEL RAYNAL, AND CORENTIN TRAVERS. A time-free assumption to implement eventual leadership. *Parallel Processing Letters*, volume 16(2) :pages 189–208, 2006.
- [12] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Time-free and timer-based assumptions can be combined to obtain eventual leadership. *IEEE Transactions on Parallel and Distributed Systems*, volume 17(7) :pages 656–666, 2006.

### Refereed Conferences

- [13] DAN ALISTARH, HAGIT ATTIYA, RACHID GUERRAOU, AND CORENTIN TRAVERS. Early deciding synchronous renaming in  $O(\log f)$  rounds or less. In *Proceedings of 19th International Colloquium Structural Information and Communication Complexity (SIROCCO)*, volume 7355 of *Lecture Notes in Computer Science*, pages 195–206. Springer, 2012.
- [14] FAITH ELLEN, PANAGIOTA FATOUROU, ELEFThERIOS KOSMAS, ALESSIA MILANI, AND CORENTIN TRAVERS. Universal constructions that ensure disjoint-access parallelism and wait-freedom. In *Proceedings of the 31st ACM Symposium on Principles of Distributed Computing (PODC)*, pages 115–124. ACM, 2012.
- [15] DAN ALISTARH, SETH GILBERT, RACHID GUERRAOU, AND CORENTIN TRAVERS. Generating fast indulgent algorithms. In *12th International Conference on Distributed Computing and Networking (ICDCN)*, volume 6522 of *Lecture Notes in Computer Science*, pages 41–52. Springer, January 2011. **Best paper award.**
- [16] ZOHIR BOUZID, PIERRE SUTRA, AND CORENTIN TRAVERS. Anonymous agreement : The janus algorithm. In *14th International Conference Principles of Distributed Systems (OPODIS)*, volume 6490 of *Lectures Notes in Computer Science*, pages 175–190. Springer, December 2011.
- [17] PIERRE FRAIGNIAUD, SERGIO RAJSBAUM, AND CORENTIN TRAVERS. Locality and checkability in wait-free computing. In *25th International Symposium on Distributed Computing (DISC)*, volume 6950 of *Lectures Notes in Computer Science*, pages 333–347. Springer, September 2011. **Best paper award.**
- [18] ZOHIR BOUZID AND CORENTIN TRAVERS.  $(\text{anti-}\Omega^x \times \Sigma_z)$ -based  $k$ -set agreement algorithms. In *14th International Conference Principles of Distributed Systems (OPODIS)*, volume 6490 of *Lectures Notes in Computer Science*, pages 189–204. Springer, December 2010.
- [19] DAN ALISTARH, SETH GILBERT, RACHID GUERRAOU, AND CORENTIN TRAVERS. Of choices, failures and asynchrony : The many faces of set-agreement. In *Proceedings of the 20th International Symposium on Algorithms and Computation (ISAAC)*, volume 5878 of *Lecture Notes in Computer Science*, pages 943–953. Springer, December 2009.
- [20] DAN ALISTARH, SETH GILBERT, RACHID GUERRAOU, AND CORENTIN TRAVERS. How to solve consensus in the smallest window of synchrony. In *22nd International Symposium Distributed Computing (DISC)*, volume 5218 of *Lecture Notes in Computer Science*, pages 32–46. Springer, September 2008.

- [21] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Narrowing power vs. efficiency in synchronous set agreement. In *9th International Conference on Distributed Computing and Networking (ICDCN)*, volume 4904 of *Lecture Notes in Computer Science*, pages 99–111. Springer, January 2008.
- [22] SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. The iterated restricted immediate snapshot model. In *14th Annual International Conference on Computing and Combinatorics (COCOON)*, volume 5092 of *Lecture Notes in Computer Science*, pages 487–497. Springer, June 2008.
- [23] JIANNONG CAO, MICHEL RAYNAL, CORENTIN TRAVERS, AND WEIGANG WU. The eventual leadership in dynamic mobile networking environments. In *13th IEEE Pacific Rim International Symposium on Dependable Computing (PRDC)*, pages 123–130. IEEE Computer Society, December 2007.
- [24] ELI GAFNI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Test & set, adaptive renaming and set agreement : a guided visit to asynchronous computability. In *26th IEEE Symposium on Reliable Distributed Systems (SRDS)*, pages 93–102. IEEE Computer Society, October 2007.
- [25] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. From renaming to set agreement. In *14th International Colloquium on Structural Information and Communication Complexity (SIROCCO)*, volume 4474 of *Lecture Notes in Computer Science*, pages 66–80. Springer, June 2007.
- [26] YEHUDA AFEK, ELI GAFNI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. Simultaneous consensus tasks : A tighter characterization of set-consensus. In *8th International Conference on Distributed Computing and Networking (ICDCN) 2006*, volume 4308 of *Lecture Notes in Computer Science*, pages 331–341. Springer, December 2006.
- [27] ROY FRIEDMAN, MICHEL RAYNAL, AND CORENTIN TRAVERS. Two abstractions for implementing atomic objects in dynamic systems. In *9th International Conference Principles of Distributed Systems (OPODIS)*, volume 3974 of *Lecture Notes in Computer Science*, pages 73–87. Springer, December 2006.
- [28] ELI GAFNI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. The committee decision problem. In *7th Latin American Symposium on Theoretical Informatics (LATIN)*, volume 3887 of *Lecture Notes in Computer Science*, pages 502–514. Springer, March 2006.
- [29] ACHOUR MOSTÉFAOUI, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. Irreducibility and additivity of set agreement-oriented failure detector classes. In *Proceedings of the Twenty-Fifth Annual ACM Symposium on Principles of Distributed Computing (PODC)*, pages 153–162. ACM, July 2006.
- [30] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Exploring gafni’s reduction land : From  $\Omega^k$  to wait-free adaptive  $(2p - \lfloor p/k \rfloor)$ -renaming via  $k$ -set agreement. In *20th International Symposium on Distributed Computing (DISC)*, volume 4167 of *Lecture Notes in Computer Science*, pages 1–15. Springer, September 2006.
- [31] PHILIPPE RAIPIN PARVÉDY, MICHEL RAYNAL, AND CORENTIN TRAVERS. Strongly terminating early-stopping  $k$ -set agreement in synchronous systems with general omission failures. In *13th International Colloquium on Structural Information and Communication Complexity (SIROCCO)*, volume 4056 of *Lecture Notes in Computer Science*, pages 182–196. Springer, 2006.

- [32] MICHEL RAYNAL AND CORENTIN TRAVERS. In search of the holy grail : Looking for the weakest failure detector for wait-free set agreement. In *10th International Conference Principles of Distributed Systems (OPODIS)*, volume 4305 of *Lecture Notes in Computer Science*, pages 3–19. Springer, December 2006.
- [33] MICHEL RAYNAL AND CORENTIN TRAVERS. Synchronous set agreement : a concise guided tour (including a new algorithm and a list of open problems). In *12th IEEE Pacific Rim International Symposium on Dependable Computing (PRDC)*, pages 267–274. IEEE Computer Society, December 2006.
- [34] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, CORENTIN TRAVERS, STACY PATTERSON, DIVYAKANT AGRAWAL, AND AMR EL ABBADI. From static distributed systems to dynamic systems. In *24th IEEE Symposium on Reliable Distributed Systems (SRDS)*, pages 109–118. IEEE Computer Society, October 2005.
- [35] PHILIPPE RAIPIN PARVÉDY, MICHEL RAYNAL, AND CORENTIN TRAVERS. Decision optimal early-stopping  $k$ -set agreement in synchronous systems prone to send omission failures. In *11th IEEE Pacific Rim International Symposium on Dependable Computing (PRDC)*, pages 23–30. IEEE Computer Society, December 2005.
- [36] ACHOUR MOSTÉFAOUI, MICHEL RAYNAL, AND CORENTIN TRAVERS. Crash-resilient time-free eventual leadership. In *23rd International Symposium on Reliable Distributed Systems (SRDS)*, pages 208–217. IEEE Computer Society, October 2004.

### Short communications

- [37] ZOHIR BOUZID AND CORENTIN TRAVERS. Brief announcement : Anonymity, failures, detectors and consensus. In *Proceedings of the 26th International Symposium on Distributed Computing (DISC)*, volume 7611 of *Lecture Notes in Computer Science*, pages 427–428. Springer, 2012.
- [38] ANTONIO FERNÁNDEZ ANTA, SERGIO RAJSBAUM, AND CORENTIN TRAVERS. Brief announcement : weakest failure detectors via an egg-laying simulation. In *Proceedings of the 28th Annual ACM Symposium on Principles of Distributed Computing, (PODC)*, pages 290–291. ACM, August 2009.
- [39] ALEJANDRO CORNEJO, SERGIO RAJSBAUM, MICHEL RAYNAL, AND CORENTIN TRAVERS. Brief announcement : Failure detectors are schedulers. In *Proceedings of the Twenty-Sixth Annual ACM Symposium on Principles of Distributed Computing (PODC)*, pages 308–309. ACM, August 2007.
- [40] ROY FRIEDMAN, MICHEL RAYNAL, AND CORENTIN TRAVERS. Brief announcement : abstractions for implementing atomic objects in dynamic systems. In *Proceedings of the Twenty-Fourth Annual ACM Symposium on Principles of Distributed Computing (PODC)*, page 354. ACM, July 2005.