



**SOUTH EAST ASIAN MATHEMATICAL SOCIETY**

# **SEAMS SCHOOL PROPOSAL**

**IMH-SEAMS SCHOOL ON COMBINATORICS**

**Hanoi**

March 2015

**Organized by**

Institute of Mathematics, VAST, Hanoi, Vietnam

**2015**

**SEAMS SCHOOL PROPOSAL**

1. The proposed title, place and dates of the SEAMS School

Title of the SEAMS School	:	IMH-SEAMS School on Combinatorics
Place	:	HANOI
Dates	:	1-15/MARCH 2015

2. Organizers (write the names, place of work, and email address, if you have more than two then add the necessary lines)

1. Name	:	Le Tuan Hoa
Institution	:	Institute of Mathematics Hanoi
Email and Phone	:	LTHOA@MATH.AC.VN
2. Name	:	Phung Ho Hai
Institution	:	Institute of Mathematics Hanoi
Email and Phone	:	PHUNG@MATH.AC.VN
3. Name	:	Nguyen Dong Yen
Institution	:	Institute of Mathematics Hanoi
Email and Phone	:	NDYEN@MATH.AC.VN

**INFORMATION ON BANK ACCOUNT**

- Beneficiary's name: Institute of Mathematics  
Address: 18 Hoang Quoc Viet Road, Cau Giay, Hanoi , Vietnam
- Account No (EUR): 001.1.14.0341412
- Beneficiary's bank: Bank for foreign trade of Vietnam  
Address: Operations Centre, 198 Tran Quang Khai Str., Hanoi, Vietnam
- SWIFT code: BFTV VNVX

3. Short Description of the Scientific Content (max 100 words)

The IHM-SEAMS school will be an activity aiming to boost the interaction and
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collaboration between junior and senior researchers in mathematics in the region and with experts from France. This is planned to be a regular school, organized once a year in the Fall semester, focused on one topic. The topic for the academic year 2014-2015 is Combinatorics.

4. The speakers of the school (names, address, emails)

1) Mr. Robert Cori  
Current position: Emeritus Professor  
Professional address: Labri, Universit\_e Bordeaux 1, 351 Cours de la Libeation  
33400 Talence  
Pole, role in the project: pole 1,  
Email: [robert.cori@labri.fr](mailto:robert.cori@labri.fr)

2) Mr. Christophe Crespelle  
Position: Assistant Professor.  
Laboratoire de l'Informatique du Parallélisme  
Ecole Normale Supérieure de Lyon  
46 Allée d'Italie  
69364 Lyon Cedex 07  
France

EMAIL : CHRISTOPHE.CRESPELLE@INRIA.FR

3) Mrs. Phan Thi Ha Duong  
Position: Associate Professor.  
Head of the Department “Mathematical Foundations for Computer Science”  
Institute of Mathematics  
Vietnam Academy of Science and Technology  
18, Hoang Quoc Viet, Hanoi, Vietnam  
email: [phanhaduong@math.ac.vn](mailto:phanhaduong@math.ac.vn)

4) Tutors:

Dr. Nguyễn Ngọc Doanh (Hanoi University of Science and technology, HUST),  
Dr. Đỗ Phan Thuận (HUST),

5. Describe in a few lines the local institution related to this school, including the main academic program and its strength. Give also the Internet site of the local institutions.

The Institute of Mathematics, Hanoi (IMH) is a leading research institute of

Vietnam. It has the history of more than 40 years, it is recognized by the Third World Academy of Science as a Center of Excellence in developing countries. It has collaborated with CIMPA since many years in organizing Research Schools and Workshops. Since 2005, IMH organizes the International Master Program. This is a joint program with several universities in France and Germany. Most of the students of IMP finish the first year (M1) in Hanoi and continue the second year (M2) in France and Germany. Many of them continue their Ph.D. study in France, Germany, Italy and the USA. Some of the students from the program have received their Master or Ph.D. degree, returned to Vietnam and joint different universities in Vietnam.

web page: <http://www.math.ac.vn>

6. Provide information about the expected participants. The number and the distribution of expected participants.

Audience: Graduate students

30 from Vietnam, of which 10 are from the International Master Program of the IMH (at least 10 female students)

08 (at least) from neighboring SEAMS countries

7. Describe the objectives and the program of the proposed school, including the courses, speakers, abstracts (8 lines each) and tentative schedules for each course.

the Winter school is two weeks long in March 2015

three mini-courses, each consists of 10 x 60-minute lectures

the courses will be held in the mornings, in the afternoons there will be tutorial sessions and discussion, lead by young researchers of the Institute of Mathematics and other universities in Hanoi.

- 1) Lecturer: PHAN Thi Ha Duong: "Introduction to combinatorics": In this course, I present basic notions in combinatorics and classical methods for enumerative combinatorics objects. This mini-course will cover notions of sets and multisets, compositions and partitions of interger, binomial and multinomial Theorems, Stirling number of the first kind and of the second kind, the principles of Dirichlet and of Inclusion and Exclusion, formal power serie and generating function.
- 2) Lecturer: Robert CORI: Combinatorics of words and Permutations and their statistics: This mini-course is composed of the following

subjects:

- Combinatorics of words
  - + generalities
  - + Automata and rational generating functions
  - + Dyck words and Catalan numbers, different objects counted by these numbers (trees, non crossing partitions, etc..)
- Permutations and their statistics:
  - + descents, ascents, eulerian number,
  - + cycles and stirling number.

3) Lecturer: Christophe CRESPELLE: "Structure of chordal graphs and algorithms": This lecture deals with the class of chordal graphs, which are those graphs containing no induced cycles of length at least 4. We give several characterisations of the class using: 1) minimal separators 2) simplicial elimination schemes and 3) intersection graphs of subtrees of a tree. We show how to use the Lex-BFS algorithm in order to perform the recognition of the class and compute the chromatic number in linear time. Finally, we consider the minimal completion problem of an arbitrary graph into a chordal graph, i.e. adding a set of edges that makes the input graph become chordal and which is minimal for inclusion among such sets, and we explain the connexions with the treewidth parameter of arbitrary graphs.

Tentative Schedule:

	Morning 8h30-12h00	Afternoon
9/3	Cori 2 hours/ Do 1 hour	Crespelle 2 hours
10/3	Cori 2 hours/ Do 1 hour	
11/3	Cori 2 hours/ Do 1 hour	Crespelle 2 hours
12/3	Cori 2 hours/ Do 1 hour	
13/3	Cori 2 hours/ Do 1 hour	Crespelle 2 hours
16/3	Phan 2 hours/ Nguyen 1 hour	Crespelle 2 hours
17/3	Phan 2 hours/ Nguyen 1 hour	
18/3	Phan 2 hours/ Nguyen 1 hour	Crespelle 2 hours
19/3	Phan 2 hours/ Nguyen 1 hour	
20/3	Phan 2 hours/ Nguyen 1 hour	

8. Provide information about provisional budget and the expected funding.

	Items	Request fund (in USD)	
		IMH and other sources	CIMPA
1	Expenses for lecturers	1.200	
2	Expenses for tutors	400	
3	Travel for Vietnamese students 20 persons x 100 USD	2.000	
4	Lodging for Vietnamese students 20 persons x 15 days x 10 USD	3.000	
5	Meals for Vietnamese students 20 persons x 15 days x 10 USD	3.000	
6	Travel for foreign SEAMS students 8 persons x 300 USD		2.400
7	Lodging for foreign SEAMS students 8 persons x 15 days x 20 USD		2.400
8	Meals for foreign SEAMS students 8 persons x 15 days x 10USD		1.200
9	Logistics	2.000	
	Total	11.600 USD	6.000 USD

9. Provide CVs for the organizers.

A. Le Tuan Hoa

- Born in 1957 in Vietnam
- Full Professor
- Director of Institute of Mathematics - VAST
- List of publication listed in MathSciNet: 52
- List of recent publication:

1. MR2891129 Hoa, Lê Tuân; Morales, Marcel Non-linear behaviour of Castelnuovo-Mumford regularity. J. Algebra 356 (2012), 207–215.

2. MR2889471 Dung, Le Xuan; Hoa, Le Tuan Castelnuovo-Mumford regularity of associated graded modules and fiber cones of filtered modules. *Comm. Algebra* 40 (2012), no. 2, 404–422.
3. MR2775813 Chardin, Marc; Dao Thanh Ha; Lê Tuân Hoa Castelnuovo-Mumford regularity of Ext modules and homological degree. *Trans. Amer. Math. Soc.* 363 (2011), no. 7, 3439–3456
4. MR2731325 Đỗ Hoàng Giang; Lê Tuân Hoa On local cohomology of a tetrahedral curve. *Acta Math. Vietnam.* 35 (2010), no. 2, 229–241.
5. MR2670214 Lê Tuân Hoa; Trần Nam Trung Partial Castelnuovo-Mumford regularities of sums and intersections of powers of monomial ideals. *Math. Proc. Cambridge Philos. Soc.* 149 (2010), no. 2, 229–246.
6. MR2643966 Hoa, Le Tuan; Tam, Nguyen Duc On some invariants of a mixed product of ideals. *Arch. Math. (Basel)* 94 (2010), no. 4, 327–337.
7. MR2550167 Hellus, Michael; Hoa, Lê Tuân; Stückrad, Jürgen Castelnuovo-Mumford regularity and the reduction number of some monomial curves. *Proc. Amer. Math. Soc.* 138 (2010), no. 1, 27–35.
8. MR2591091 Hellus, Michael; Hoa, Lê Tuân; Stückrad, Jürgen Gröbner bases of simplicial toric ideals. *Nagoya Math. J.* 196 (2009), 67–85.
9. MR2403695 Lê Tuân Hoa Finiteness of Hilbert functions and bounds for Castelnuovo-Mumford regularity of initial ideals. *Trans. Amer. Math. Soc.* 360 (2008), no. 9, 4519–4540.
10. MR2394265 Ha, Dao Thanh; Hoa, Lê Tuân Castelnuovo-Mumford regularity of some modules. *Comm. Algebra* 36 (2008), no. 3, 992–1004.
11. MR2388042 Hoa, Lê Tuân; Trung, Trần Nam Castelnuovo-Mumford regularity of sums of powers of polynomial ideals. *Comm. Algebra* 36 (2008), no. 2, 806–820.

## B. Phung Ho Hai

- Born in 1970 in Vietnam
- Full Professor
- Deputy Director of Institute of Mathematics –VAST
- List of publication listed in MathSciNet: 26
- **List of recent publication:**

1. MR2908525 Nguyen Thi Phuong Dung; Phung Ho Hai; Nguyen Huy Hung Construction of irreducible representations of the quantum super group  $GL_q(3|1)$ . *Acta Math. Vietnam.* 36 (2011), no. 2, 215–229.
2. MR2761929 Esnault, Hélène; Hai, Phùng Hồ Two small remarks on Nori fundamental group scheme. *Algebraic geometry in East Asia—Seoul 2008*, 237–243, *Adv. Stud. Pure Math.*, 60, Math. Soc. Japan, Tokyo, 2010.

3. MR2498355 Esnault, Hélène; Hai, Phùng Hô, The fundamental groupoid scheme and applications. *Ann. Inst. Fourier (Grenoble)* 58 (2008), no. 7, 2381–2412.
4. MR2448024 Phùng Hô Hai, Tannaka-Krein duality for Hopf algebroids. *Israel J. Math.* 167 (2008), 193–225.
5. MR2402410 Esnault, Hélène; Hai, Phùng Hô; Sun, Xiaotao, On Nori's fundamental group scheme. *Geometry and dynamics of groups and spaces*, 377–398, *Progr. Math.*, 265, Birkhäuser, Basel, 2008.
6. MR2407940 Esnault, Hélène; Hai, Phùng Hô, Packets in Grothendieck's section conjecture. *Adv. Math.* 218 (2008), no. 2, 395–416.
7. MR2366123 Hai, Phùng Hô; Kriegk, Benoit; Lorenz, Martin N-homogeneous superalgebras. *J. Noncommut. Geom.* 2 (2008), no. 1, 1–51.
8. MR2346948 Hai, Phùng Hô; Lorenz, Martin Koszul algebras and the quantum MacMahon master theorem. *Bull. Lond. Math. Soc.* 39 (2007), no. 4, 667–676.

#### C. Nguyen Dong Yen

- Born in 1958 in Vietnam
  - Full Professor
  - Head of Graduate Center of the Institute of Mathematics - VAST
  - List of publication listed in MathSciNet: 88
  - **List of recent publications:**
1. MR3130516 Lee, G. M.; Yen, N. D., Coderivatives of a Karush-Kuhn-Tucker point set map and applications. *Nonlinear Anal.* 95 (2014), 191–201.
  2. MR3063934 Huong, N. T. T.; Khanh, P. D.; Yen, N. D., Multivalued Tikhonov trajectories of general affine variational inequalities. *J. Optim. Theory Appl.* 158 (2013), no. 1, 85–96.
  3. MR3015979 Tuan, Hoang Ngoc; Yen, Nguyen Dong, Convergence of Pham Dinh–Le Thi's algorithm for the trust-region subproblem. *J. Global Optim.* 55 (2013), no. 2, 337–347.
  4. MR3023758 Lee, G. M.; Tam, N. N.; Yen, N. D., Stability of linear-quadratic minimization over Euclidean balls. *SIAM J. Optim.* 22 (2012), no. 3, 936–952.
  5. MR2981001 Huong, N. T. T.; Hoa, T. N.; Phuong, T. D.; Yen, N. D., A property of bicriteria affine vector variational inequalities. *Appl. Anal.* 91 (2012), no. 10, 1867–1879.
  6. MR2917225 Le Thi, Hoai An; Pham Dinh, Tao; Yen, Nguyen Dong, Behavior of DCA sequences for solving the trust-region subproblem. *J. Global Optim.* 53 (2012), no. 2, 317–329.



7. MR2886605 Kim, D. S.; Tam, N. N.; Yen, N. D., Solution existence and stability of quadratically constrained convex quadratic programs. *Optim. Lett.* 6 (2012), no. 2, 363–373.
8. MR2885325 Yen, Nguyen Dong, Linear fractional and convex quadratic vector optimization problems. *Recent developments in vector optimization*, 297–328, *Vector Optim.*, Springer, Berlin, 2012.
9. MR2861359 Tuyen, N. V.; Yen, N. D., On the concept of generalized order optimality. *Nonlinear Anal.* 75 (2012), no. 3, 1592–1601.
10. MR3131085 P Qui, N. T.; Yen, N. D., Some properties of polyhedral multifunctions. *J. Nonlinear Convex Anal.* 12 (2011), no. 3, 483–499.
11. MR2908528 Nguyen Quang Huy; Nguyen Dong Yen, Minimax variational inequalities. *Acta Math. Vietnam.* 36 (2011), no. 2, 265–281.
12. MR2801262 Lee, G. M.; Yen, N. D., Fréchet and normal coderivatives of implicit multifunctions. *Appl. Anal.* 90 (2011), no. 6, 1011–1027.
13. MR2772135 Yen, N. D.; Yao, J.-C., Monotone affine vector variational inequalities. *Optimization* 60 (2011), no. 1-2, 53–68.
14. MR2771615 Le Thi, Hoai An; Pham Dinh, Tao; Yen, Nguyen Dong, Properties of two DC algorithms in quadratic programming. *J. Global Optim.* 49 (2011), no. 3, 481–495.
15. MR2770898 Chieu, N. H.; Chuong, T. D.; Yao, J.-C.; Yen, N. D. Characterizing convexity of a function by its Fréchet and limiting second-order subdifferentials. *Set-Valued Var. Anal.* 19 (2011), no. 1, 75–96.
16. MR2766763 Yao, J.-C.; Yen, N. D., Parametric variational system with a smooth-boundary constraint set. *Variational analysis and generalized differentiation in optimization and control*, 205–221, *Springer Optim. Appl.*, 47, Springer, New York, 2010.
17. MR2720595 Yang, X. Q.; Yen, N. D., Structure and weak sharp minimum of the Pareto solution set for piecewise linear multiobjective optimization. *J. Optim. Theory Appl.* 147 (2010), no. 1, 113–124.
18. MR2668348 Chuong, T. D.; Yao, J.-C.; Yen, N. D., Further results on the lower semicontinuity of efficient point multifunctions. *Pac. J. Optim.* 6 (2010), no. 2, 405–422.
19. MR2606804 Chieu, N. H.; Yao, J.-C.; Yen, N. D., Relationships between Robinson metric regularity and Lipschitz-like behavior of implicit multifunctions. *Nonlinear Anal.* 72 (2010), no. 9-10, 3594–3601.

10. Provide CVs for the main lecturers

Bbn

## A) Prof. Cori Robert (Mr.)

- Age: 68 years
- Current Position: Professeur Em\_erite
- Professional Adress: Labri, Universit\_e Bordeaux 1, 351 cours de la Libeation 33400 Talence Pole, Role in the project: Pole 1,
- Leading research in the use of bijective combinatorics for random generation and on an other hand developments around the discrete sandpile model.
- Professionnal experience.

Engineer Ecole Polytechnique (1966). PHD advisor Marcel Paul Schutzenberger (1973). Professor University Bordeaux 1 (1972-2009).

Part time Professor at Ecole Polytechnique (1992-2007).

- Main Responsibilities.

Director of Greco Programmation (1981-1988) Vice President University Bordeaux 1 (2003-2005) Co Chair: STACS (1988,1989), FPSAC (2009).

Organisation of a meeting dedicated to Don Knuth (November 2007)

- Research areas (in general). Enumerative combinatorics, discrete and combinatorial models for statistical physics, distributed algorithms, automata theory.

### - Publications

1. Cori, Robert; Marcus, Michel; Schaeffer, Gilles Odd permutations are nicer than even ones. *European J. Combin.* 33 (2012), no. 7, 1467–1478.
2. Cori, Robert; Mathieu, Claire; Robson, John Michael On the number of indecomposable permutations with a given number of cycles. *Electron. J. Combin.* 19 (2012), no. 1, Paper 49, 14 pp.
3. Ayyer, Arvind; Cori, Robert; Gouyou-Beauchamps, Dominique Monotone triangles and 312 pattern avoidance. *Electron. J. Combin.* 18 (2011), no. 2, Paper 26, 22 pp.
4. Cori, Robert; Mathieu, Claire Indecomposable permutations with a given number of cycles. 21st International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2009), 301–312, *Discrete Math. Theor. Comput. Sci. Proc.*, AK, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2009
5. Cori, Robert Indecomposable permutations, hypermaps and labeled Dyck paths. *J. Combin. Theory Ser. A* 116 (2009), no. 8, 1326–1343.

6. Cori, Robert Hypermaps and indecomposable permutations. *European J. Combin.* 30 (2009), no. 2, 540–541.
7. Cori, Robert; Dartois, Arnaud; Rossin, Dominique Avalanche polynomials of some families of graphs. *Mathematics and computer science. III*, 81–94, Trends Math., Birkhäuser, Basel, 2004.
8. Charron-Bost, Bernadette; Cori, Robert A note on linearizability and the global time axiom. *Parallel Process. Lett.* 13 (2003), no. 1, 19–24.
9. Cori, Robert; Le Borgne, Yvan The sand-pile model and Tutte polynomials. *Formal power series and algebraic combinatorics (Scottsdale, AZ, 2001)*. *Adv. in Appl. Math.* 30 (2003), no. 1-2, 44–52.
10. Cori, Robert; Schaeffer, Gilles Description trees and Tutte formulas. *Selected papers in honor of Jean Berstel*. *Theoret. Comput. Sci.* 292 (2003), no. 1, 165–183.
11. Cori, Robert; Poulalhon, Dominique Enumeration of  $(p,q)$ -parking functions. *LaCIM 2000 Conference on Combinatorics, Computer Science and Applications (Montreal, QC)*. *Discrete Math.* 256 (2002), no. 3, 609–623.
12. Cori, Robert; Rossin, Dominique; Salvy, Bruno Polynomial ideals for sandpiles and their Gröbner bases. *Theoret. Comput. Sci.* 276 (2002), no. 1-2, 1–15.
13. Formal power series and algebraic combinatorics. *Selected papers from the 11th International Conference (FPSAC'99) held in Barcelona, June 7–11, 1999*. Edited by R. Cori and M. Noy. *Discrete Math.* 246 (2002), no. 1-3. Elsevier Science B.V., Amsterdam, 2002. pp. i–x and 1–361.
14. Cori, Robert; Rossin, Dominique On the sandpile group of dual graphs. *European J. Combin.* 21 (2000), no. 4, 447–459.
15. Cori, Robert; Marcus, Michel Counting non-isomorphic chord diagrams. *Theoret. Comput. Sci.* 204 (1998), no. 1-2, 55–73.
16. Charron-Bost, Bernadette; Cori, Robert; Petit, Antoine Introduction à l'algorithmique des objets partagés. (French) [Introduction to the algorithmics of shared objects] *RAIRO Inform. Théor. Appl.* 31 (1997), no. 2, 97–148.
17. Bergey, A.; Cori, R. On the orbits of the product of two permutations. *Theoret. Comput. Sci.* 131 (1994), no. 2, 449–461.
18. Cori, Robert; Métivier, Yves; Zielonka, Wiesław Asynchronous mappings and asynchronous cellular automata. *Inform. and Comput.* 106 (1993), no. 2, 159–202.
19. Cori, Robert; Sopena, Eric Some combinatorial aspects of time-stamp systems. *European J. Combin.* 14 (1993), no. 2, 95–102.
20. Cori, Robert; Machì, Antonio Maps, hypermaps and their automorphisms: a survey. I, II, III. *Exposition. Math.* 10 (1992), no. 5, 403–427, 429–447, 449–467.
21. Cori, Robert; Formisano, Maria Rosaria On the number of partially abelian square-free words on a three-letter alphabet. *Theoret. Comput. Sci.* 81 (1991), no. 1, (Part A), 147–153.

22. Cori, Robert; Machi, Antonio Cartes, hypercartes et leurs groupes d'automorphismes. (French) [Maps, hypermaps and their groups of automorphisms] Mots, 232–245, Lang. Raison. Calc., Hermès, Paris, 1990.
23. Cori, Robert; Formisano, Maria Rosaria Partially abelian squarefree words. RAIRO Inform. Théor. Appl. 24 (1990), no. 6, 509–520.
24. MR1027385 STACS 89. Proceedings of the Sixth Annual Symposium on Theoretical Aspects of Computer Science held in Paderborn, February 16–18, 1989. Edited by B. Monien and R. Cori. Lecture Notes in Computer Science, 349. Springer-Verlag, Berlin, 1989. viii+544 pp. ISBN: 3-540-50840-6 68-06
25. MR1023633 Cori, R.; Métivier, Y. Approximation of a trace, asynchronous automata and the ordering of events in a distributed system. Automata, languages and programming (Tampere, 1988), 147–161, Lecture Notes in Comput. Sci., 317, Springer, Berlin, 1988.
26. MR0974773 Cori, Robert; Sopena, Eric; Latteux, Michel; Roos, Yves 2-asynchronous automata. Theoret. Comput. Sci. 61 (1988), no. 1, 93–102.
27. MR0935784 STACS 88. Proceedings of the Fifth Annual Symposium on Theoretical Aspects of Computer Science held in Bordeaux, February 11–13, 1988. Edited by R. Cori and M. Wirsing. Lecture Notes in Computer Science, 294. Springer-Verlag, Berlin, 1988. x+404 pp. ISBN: 3-540-18834-7 68-06
28. MR0925556 Cori, R.; Machi, Antonio Flows on hypermaps. Glasgow Math. J. 30 (1988), no. 1, 17–29.
29. MR0859292 Cori, Robert; Dulucq, Serge; Viennot, Gérard Shuffle of parenthesis systems and Baxter permutations. J. Combin. Theory Ser. A 43 (1986), no. 1, 1–22.
30. MR0848781 Cori, R.; Dulucq, S. Colourings of planar maps and the equality of two languages. CAAP '86 (Nice, 1986), 6–16, Lecture Notes in Comput. Sci., 214, Springer, Berlin, 1986.
31. MR0795769 Cori, Robert; Perrin, Dominique Automates et commutations partielles. (French) [Automata and partial commutations] RAIRO Inform. Théor. 19 (1985), no. 1, 21–32.
32. MR0785150 Cori, Robert; Métivier, Yves Recognizable subsets of some partially abelian monoids. Theoret. Comput. Sci. 35 (1985), no. 2-3, 179–189.
33. MR0722735 Bianchi, Giuliana; Cori, Robert Colorings of hypermaps and a conjecture of Brenner and Lyndon. Pacific J. Math. 110 (1984), no. 1, 41–48.
34. MR0675953 Lothaire, M. Combinatorics on words. A collective work by Dominique Perrin, Jean Berstel, Christian Choffrut, Robert Cori, Dominique Foata, Jean Eric Pin, Guiseppe Pirillo, Christophe Reutenauer, Marcel-P. Schützenberger, Jacques Sakarovitch and Imre Simon. With a foreword by Roger Lyndon. Edited and with a preface by Perrin. Encyclopedia of Mathematics and its Applications, 17. Addison-Wesley Publishing Co., Reading, Mass., 1983. xix+238 pp. ISBN: 0-201-13516-7

35. MR0674921 Cori, Robert In memoriam: Laurent Chottin. (French) *RAIRO Inform. Théor.* 16 (1982), no. 2, 91–92. 01A70
36. MR0674923 Chottin, Laurent; Cori, Robert Une preuve combinatoire de la rationalité d'une série génératrice associée aux arbres. (French) [A combinatorial proof of the rationality of a generating series associated with trees] *RAIRO Inform. Théor.* 16 (1982), no. 2, 113–128.
37. MR0672104 Cori, Robert; Machì, Antonio Construction of maps with prescribed automorphism group. *Theoret. Comput. Sci.* 21 (1982), no. 1, 91–98.
38. MR0663295 Cori, Robert; Machì, Antonio On some properties of the genus of a permutation pair. II. (Italian) *Boll. Un. Mat. Ital. A (6) 1* (1982), no. 2, 297–301.
39. MR0638407 Cori, Robert; Machì, Antonio; Penaud, Jean-Guy; Vauquelin, Bernard On the automorphism group of a planar hypermap. *European J. Combin.* 2 (1981), no. 4, 331–334.
40. MR0607206 Cori, Robert; Machì, Antonio On some properties of the genus of a permutation pair. (Italian) *Boll. Un. Mat. Ital. A (5) 18* (1981), no. 1, 84–89.
41. MR0638363 Cori, Robert; Vauquelin, Bernard Planar maps are well labeled trees. *Canad. J. Math.* 33 (1981), no. 5, 1023–1042
42. MR0597353 Cori, Robert; Penaud, Jean-Guy The complexity of a planar hypermap and that of its dual. *Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montréal, Que., 1979), Part II. Ann. Discrete Math.* 9 (1980), 53–62
43. MR0522637 Cori, Robert Formules d'inversion de séries formelles. (French) *Séries formelles en variables non commutatives et applications (Proc. 5e École de Printemps Informat. Théorique, Vieux-Boucau les Bains, 1977)*, pp. 55–67, École Nat. Sup. Tech. Avancées, Paris, 1978.
44. MR0519798 Cori, R. Langages, séries algébriques et énumération des cartes planaires. (French) *Langages algébriques (Proc. First Meeting, Information Theory, Bonascre, 1973)*, pp. 265–279, École Nat. Sup. Tech. Avancées, Paris, 1978.
45. MR0444530 Arditti, J. C.; Cori, R. Chaînes maximales de préordres. (French) *Aequationes Math.* 15 (1977), no. 1, 49–54.
46. MR0465933 Cori, Robert Planarité et algébricité. (French) *Journées algorithmiques (École Norm. Sup., Paris, 1975)*, pp. 33–44. *Asterisque*, No. 38-39, Soc. Math. France, Paris, 1976.
47. MR0404045 Cori, Robert Un code pour les graphes planaires et ses applications. With an English abstract. *Asterisque*, No. 27. Société Mathématique de France, Paris, 1975. i+169 pp.
48. MR0408330 Cori, Robert Sur des langages vérifiant des équations avec opérateur. (French) *Automata, languages and programming (Proc. Sympos., Rocquencourt, 1972)*, pp. 31–43. North-Holland, Amsterdam, 1973.
49. MR0311506 Cori, Robert Sur la rationalité de certaines séries génératrices. (French) *Discrete Math.* 3 (1972), 315–332.

50. MR0297644 Cori, Robert; Richard, Jean Énumération des graphes planaires à l'aide des séries formelles en variables non commutatives. (French) *Discrete Math.* 2 (1972), 115–162.
51. MR0297490 Reviewed Cori, Robert Sur un opérateur lié aux graphes planaires. (French) *C. R. Acad. Sci. Paris Sér. A-B* 274 (1972), A1197–A1200.
52. MR0408329 Reviewed Cori, Robert; Richard, Jean Some languages related to planar maps. *Theory of machines and computations (Proc. Internat. Sympos., Technion, Haifa, 1971)*, pp. 115–121. Academic Press, New York, 1971
53. MR0304226 Reviewed Arditti, J. C.; Cori, R. Hamilton circuits in the comparability graph of a tree. *Combinatorial theory and its applications, I (Proc. Colloq., Balatonfüred, 1969)*, pp. 41–53. North-Holland, Amsterdam, 1970.
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## **B. Dr. Christophe Crespelle (Mr.)**

- Position: Assistant Professor (Maître de conférences) at Université Claude Bernard Lyon 1; Member of the DANTE INRIA team of the LIP laboratory; Member of the IXXI, the Rhône-Alpes Complex System Institute.

- E-mail: Christophe.crespelle@inria.fr (replace the three-letter words with . @ .)

- Mailing address: Laboratoire de l'Informatique du Parallélisme; Ecole Normale Supérieure de Lyon; 46 Allée d'Italie; 69364 Lyon Cedex 07; France

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**C) Assoc. Prof. PHAN Thi Ha Duong (Mrs.)**

- Born in 1973 in Vietnam
- Associate Professor
- Head of Department of Mathematical foundation of Informatics of Institute of Mathematics - VAST
- Mailing address: Institute of Mathematics – VAST, 18 Hoang Quoc Viet Road, CauGiay District, 10307, Hanoi, Vietnam"
- Email : phanhaduong@math.ac.vn ; <http://vie.math.ac.vn/~phduong/>

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