

## Publications by Giuseppe Castagna.

[version of February 23, 2023]

### Books

- [1] G. Castagna. *Object-Oriented Programming: A Unified Foundation*. Progress in Theoretical Computer Science Series. Birkäuser, Boston, 1997. ISBN 3-7643-3905-5 (hardcover, 388 pages).

### Book chapters

- [2] V. Benzaken, G. Castagna, H. Hosoya, B.C. Pierce, and S. Vansummeren. *The Encyclopedia of Database Systems*, chapter “XML Typechecking”. Springer, 2009. ISBN 978-0-387-35544-3.
- [3] M. Bugliesi, G. Castagna, S. Crafa, R. Focardi, and V. Sassone. Name-passing calculi and crypto-primitives: a survey. In *Foundations of Security Analysis and Design*, number 2946 in Lecture Notes in Computer Science, pages 91–138. Springer, 2004.

### Edition of proceedings or special issues

- [4] G. Castagna and A. Gordon, editors. *POPL 2017 - Proceedings of the 42nd Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages*. ACM Press, 2017.
- [5] G. Castagna, editor. *ECOOP 2013 - Proceedings of the 27th European Conference on Object-Oriented Programming*, volume 7920 of *Lecture Notes in Computer Science*. Springer, 2013.
- [6] G. Castagna and J.T. Boyland, editors. *Selected Papers of the “18th European Symposium on Programming”*. Special issue of *Theoretical Computer Science*, volume 411, issue 51-52. Elsevier, 2010.
- [7] G. Castagna, editor. *Programming Languages and Systems: Proceedings of the 18th European Symposium on Programming, ESOP 2009*, volume 5502 of *Lecture Notes in Computer Science*. Springer, 2009.
- [8] G. Castagna and I. Walukiewicz, editors. *Selected Papers of the Conference “International Colloquium on Automata, Languages and Programming 2008”*. Special issue of *Logical Methods in Computer Science*. IfCoLog, 2009.
- [9] R. Amadio, A. Asperti, and G. Castagna, editors. *From Type Theory to Morphological Complexity*. Special issue of *Information and Computation*, volume 207 issue 5. Academic Press, 2008.
- [10] G. Castagna and A. Compagnoni, editors. *Foundation of Object-Oriented Languages*. Special issue of *Information and Computation*, volume 177(1). Academic Press, 2002.

### Refereed international journals

- [11] G. Castagna, M. Laurent, V. Lanvin, and K. Nguyễn. Revisiting occurrence typing. *Science of Computer Programming*, 217:102781, mar 2022.
- [12] G. Castagna. Covariance and contravariance: a fresh look at an old issue (a primer in advanced type systems for learning functional programmers). *Logical Methods in Computer Science*, 16(1):15:1–15:58, 2020. First version: 2013. New corrected and enhanced version: February 1, 2023.

- [13] D. Ancona, V. Bono, M. Bravetti, G. Castagna, J. Campos, P.-M. Deniérou, S. Gay, N. Gesbert, E. Giachino, R. Hu, E. Broch Johnsen, F. Martins, V. Mascardi, F. Montesi, N. Ng, R. Neykova, L. Padovani, V. Vasconcelos, and N. Yoshida. Behavioral Types in Programming Languages. *Foundations and Trends in Programming Languages*, 3:95–230, 2016.
- [14] V. Benzaken, G. Castagna, D. Colazzo, and K. Nguyễn. Optimizing XML querying using type-based document projection. *ACM Transactions on Database Systems*, 38(1):4:1–4:45, 2013.
- [15] G. Castagna, M. Dezani Ciancaglini, and L. Padovani. On global types and multi-party sessions. *Logical Methods in Computer Science*, 8(1:24):1–45, 2012. Extended version of the invited talk given at FMOODS & FORTE 2011.
- [16] G. Castagna, N. Gesbert, and L. Padovani. A theory of contracts for web services. *ACM Transactions on Programming Languages and Systems*, 31(5):1–61, 2009. Supersedes the article in POPL '08.
- [17] H. Hosoya, A. Frisch, and G. Castagna. Parametric polymorphism for XML. *ACM Transactions on Programming Languages and Systems*, 32(1):1–56, 2009.
- [18] G. Castagna, R. De Nicola, and D. Varacca. Semantic subtyping for the  $\pi$ -calculus. *Theoretical Computer Science*, 398(1-3):217–242, 2008. Essays in honour of Mario Coppo, Mariangiola Dezani-Ciancaglini and Simona Ronchi della Rocca.
- [19] A. Frisch, G. Castagna, and V. Benzaken. Semantic subtyping: dealing set-theoretically with function, union, intersection, and negation types. *Journal of the ACM*, 55(4):1–64, 2008.
- [20] A. Phillips, L. Cardelli, and G. Castagna. A graphical representation for biological processes in the stochastic pi-calculus. *Transactions on Computational Systems Biology*, 7:123–152, 2006.
- [21] G. Castagna, J. Vitek, and F. Zappa Nardelli. The Seal Calculus. *Information and Computation*, 201(1):1–54, 2005.
- [22] M. Bugliesi, G. Castagna, and S. Crafa. Access control for mobile agents: The Calculus of Boxed Ambients. *ACM Transactions on Programming Languages and Systems*, 26(1):57–124, 2004.
- [23] M. Bugliesi and G. Castagna. Behavioral typing for Safe Ambients. *Computer Languages*, 28(1):61–99, November 2002.
- [24] G. Castagna and G. Chen. Dependent types with subtyping and late-bound overloading. *Information and Computation*, 168(1):1–67, 2001.
- [25] G. Castagna and J. Vitek. Seal: A framework for secure mobile computations. In H. Bal, B. Belkhouche, and L. Cardelli, editors, *Internet Programming Languages*, number 1686 in Lecture Notes in Computer Science, pages 47–77. Springer, 1999. Collected works.
- [26] G. Castagna. Unifying overloading and  $\lambda$ -abstractions:  $\lambda^{\{\}}$ . *Theoretical Computer Science*, 176(1-2):337–345, April 1997.
- [27] K. Bruce, L. Cardelli, G. Castagna, The Hopkins Object Group, G. Leavens, and B. Pierce. On binary methods. *Theory and Practice of Object Systems*, 1(3):221–242, 1996.
- [28] G. Castagna. Integration of parametric and “ad hoc” second order polymorphism in a calculus with subtyping. *Formal Aspects of Computing*, 8(3):247–293, 1996.
- [29] G. Castagna. Covariance and contravariance: conflict without a cause. *ACM Transactions on Programming Languages and Systems*, 17(3):431–447, 1995.
- [30] G. Castagna. A meta-language for typed object-oriented languages. *Theoretical Computer Science*, 151(2):297–352, November 1995.
- [31] G. Castagna, G. Ghelli, and G. Longo. A calculus for overloaded functions with subtyping. *Information and Computation*, 117(1):115–135, February 1995.

### Invited Articles

- [32] Giuseppe Castagna, Mariangola Dezani-Ciancaglini, Elena Giachino, and Luca Padovani. Foundations of session types: 10 years later. In *Principles and Practice of Programming Languages 2019 (PPDP '19)*, pages 1–3. ACM, New York, 2019. Invited talk, *Most Influential Paper 10-Years Award*.
- [33] G. Castagna, M. Dezani Ciancaglini, and L. Padovani. On global types and multi-party sessions. In *FMOODS & FORTE 2011, joint 13th IFIP International Conference on Formal Methods for Open Object-based Distributed Systems and 31st IFIP International Conference on FORMal TEchniques for Networked and Distributed Systems.*, number 6722 in Lecture Notes in Computer Science. Springer, 2011. Invited talk.
- [34] G. Castagna. CDuce, an XML processing programming language: From theory to practice. In *Proc. of SBLP 2007, XI Brazilian Symposium on Programming Languages*, pages 3–4. SBC - Brazilian Computer Society, 2007.
- [35] G. Castagna. Patterns and types for querying XML. In *Proceedings of DBPL 2005, 10th International Symposium on Database Programming Languages* Lecture Notes in Computer Science, n.3774, pages 1-26 Springer (full version) and *XSym 2005, 3rd International XML Database Symposium* Lecture Notes in Computer Science n.3671, pages 1-3, Springer (summary), 2005. Joint DBPL-XSym invited talk.
- [36] G. Castagna. Semantic subtyping: challenges, perspectives, and open problems. In *ICTCS 2005, Italian Conference on Theoretical Computer Science*, number 3701 in Lecture Notes in Computer Science, pages 1–20. Springer, 2005.
- [37] G. Castagna and A. Frisch. A gentle introduction to semantic subtyping. In *Proceedings of PPDP '05, the 7th ACM SIGPLAN International Symposium on Principles and Practice of Declarative Programming*, pages 198-208, ACM Press (full version) and *ICALP '05, 32nd International Colloquium on Automata, Languages and Programming*, Lecture Notes in Computer Science n. 3580, pages 30-34, Springer (summary), Lisboa, Portugal, July 2005. Joint ICALP-PPDP keynote talk.
- [38] G. Castagna. An overview of Boxed Ambients. In *TOSCA '01, Theory of Concurrency, Higher Order, and Types Workshop*, number 62 in Electronic Notes in Theoretical Computer Science, pages 1–5. Elsevier Science B.V., 2001. Invited lecture based on joint work with M. Bugliesi and S. Crafa: [69, 70].

### International Conferences with peer reviewing selection

- [39] Giuseppe Castagna, Mickaël Laurent, Kim Nguyễn, and Matthew Lutze. On type-cases, union elimination, and occurrence typing. *Proc. ACM Program. Lang.*, 6(POPL), January 2022.
- [40] G. Castagna, G. Duboc, V. Lanvin, and J. G. Siek. A space-efficient call-by-value virtual machine for gradual set-theoretic types. In *IFL 2019: the 31st Symposium on Implementation and Application of Functional Languages*, sep 2019.
- [41] Giuseppe Castagna, Victor Lanvin, Tommaso Petrucciani, and Jeremy G. Siek. Gradual typing: a new perspective. *Proc. ACM Program. Lang.*, 3, Article 16(POPL '19: 46th ACM Symposium on Principles of Programming Languages), January 2019.
- [42] Tommaso Petrucciani, Giuseppe Castagna, Davide Ancona, and Elena Zucca. Semantic subtyping for non-strict languages. In *24th International Conference on Types for Proofs and Programs (TYPES 2018)*, volume 130 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 4:1–4:24. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2019.
- [43] V. Benzaken, G. Castagna, L. Daynes, J. Lopez, K. Nguyễn, and R. Vernoux. Language-integrated queries: a BOLDR approach. In *Proceedings of the Web Conference (WWW2018), Web Programming track*, April 2018.

- [44] G. Castagna and V. Lanvin. Gradual typing with union and intersection types. *Proc. ACM Program. Lang.*, 1, Article 41(ICFP '17), September 2017.
- [45] G. Castagna, T. Petrucciani, and K. Nguyễn. Set-theoretic types for polymorphic variants. In *ICFP '16, 21st ACM SIGPLAN International Conference on Functional Programming*, pages 378–391, September 2016.
- [46] G. Castagna, H. Im, K. Nguyễn, and V. Benzaken. A core calculus for XQuery 3.0. In *ESOP '15: 24th European Symposium on Programming*, number 5710 in Lecture Notes in Computer Science, pages 232–256. Springer, 2015.
- [47] G. Castagna, K. Nguyễn, Z. Xu, and P. Abate. Polymorphic functions with set-theoretic types. Part 2: Local type inference and type reconstruction. In *POPL '15, 42nd ACM Symposium on Principles of Programming Languages*, pages 289–302, January 2015.
- [48] G. Castagna, K. Nguyễn, Z. Xu, H. Im, S. Lenglet, and L. Padovani. Polymorphic functions with set-theoretic types. Part 1: Syntax, semantics, and evaluation. In *POPL '14, 41st ACM Symposium on Principles of Programming Languages*, pages 5–17, January 2014.
- [49] V. Benzaken, G. Castagna, K. Nguyễn, and J. Siméon. Static and dynamic semantics of NoSQL languages. In *POPL '13, 40th ACM Symposium on Principles of Programming Languages*, pages 101–113, 2013.
- [50] G. Castagna and Z. Xu. Set-theoretic foundation of parametric polymorphism and subtyping. In *ICFP '11: 16th ACM-SIGPLAN International Conference on Functional Programming*, pages 94–106, September 2011.
- [51] G. Castagna, M. Dezani-Ciancaglini, E. Giachino, and L. Padovani. Foundations of session types. In *PPDP '09: 11th international ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming*, pages 219–230. ACM, 2009.
- [52] G. Castagna and L. Padovani. Contracts for mobile processes. In *CONCUR 2009, 20th. International Conference on Concurrency Theory*, number 5710 in Lecture Notes in Computer Science, pages 211–228. Springer, 2009.
- [53] V. Benzaken, G. Castagna, D. Colazzo, and C. Miachon. Pattern by Example: type-driven visual programming of XML queries. In *PPDP '08: 10th international ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming*, pages 131–142. ACM, 2008.
- [54] G. Castagna, N. Gesbert, and L. Padovani. A theory of contracts for web services. In *POPL '08, 35th ACM Symposium on Principles of Programming Languages*, pages 261–272, January 2008.
- [55] G. Castagna and K. Nguyễn. Typed iterators for XML. In *ICFP '08: 13th ACM-SIGPLAN International Conference on Functional Programming*, pages 15–26, April 2008.
- [56] V. Benzaken, G. Castagna, D. Colazzo, and K. Nguyễn. Type-based XML projection. In *VLDB 2006, 32nd International Conference on Very Large Data Bases*, pages 271–282, 2006.
- [57] S. Carpineti, G. Castagna, C. Laneve, and L. Padovani. A formal account of contracts for Web Services. In *WS-FM, 3rd Int. Workshop on Web Services and Formal Methods*, number 4184 in Lecture Notes in Computer Science, pages 148–162. Springer, 2006.
- [58] G. Castagna, M. Dezani-Ciancaglini, and D. Varacca. Encoding CDuce into the CPi-calculus. In *CONCUR 2006, 17th. International Conference on Concurrency Theory*, number 4137 in Lecture Notes in Computer Science, pages 310–326. Springer, 2006.

- [59] V. Benzaken, G. Castagna, and C. Miachon. A full pattern-based paradigm for XML query processing. In *PADL 05, 7th International Symposium on Practical Aspects of Declarative Languages*, number 3350 in Lecture Notes in Computer Science, pages 235–252. Springer, January 2005.
- [60] G. Castagna, D. Colazzo, and A. Frisch. Error mining for regular expression patterns. In *ICTCS 2005, Italian Conference on Theoretical Computer Science*, number 3701 in Lecture Notes in Computer Science, pages 160–172. Springer, 2005.
- [61] G. Castagna, R. De Nicola, and D. Varacca. Semantic subtyping for the  $\pi$ -calculus. In *LICS '05, 20th Annual IEEE Symposium on Logic in Computer Science*. IEEE Computer Society Press, 2005.
- [62] H. Hosoya, A. Frisch, and G. Castagna. Parametric polymorphism for XML. In *POPL '05, 32nd ACM Symposium on Principles of Programming Languages*, pages 50–62. ACM Press, 2005.
- [63] V. Benzaken, M. Burelle, and G. Castagna. Information flow security for XML transformations. In *ASIAN '03, 8th Asian Computing Science Conference*, number 2896 in Lecture Notes in Computer Science, pages 33–53. Springer, December 2003.
- [64] V. Benzaken, G. Castagna, and A. Frisch. CDuce: an XML-centric general-purpose language. In *ICFP '03, 8th ACM International Conference on Functional Programming*, pages 51–63, Uppsala, Sweden, 2003. ACM Press.
- [65] G. Castagna and F. Zappa Nardelli. The Seal Calculus revisited: contextual equivalence and bisimilarity. In *FST&TCS '02, 22th Conference on the Foundations of Software Technology and Theoretical Computer Science*, number 2556 in Lecture Notes in Computer Science, pages 85–96. Springer, December 2002.
- [66] S. Crafa, M. Bugliesi, and G. Castagna. Information flow security for Boxed Ambients. In *Foundations of Wide Area Network Computing (F-WAN)*, number 66(3) in Electronic Notes in Theoretical Computer Science. Elsevier Science B.V., 2002.
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- [68] M. Bugliesi and G. Castagna. Secure safe ambients. In *POPL '01, 28th ACM Symposium on Principles of Programming Languages*, pages 222–235, London, 2001. ACM Press. Contained in [23].
- [69] M. Bugliesi, G. Castagna, and S. Crafa. Boxed ambients. In *TACS 2001, 4th. International Symposium on Theoretical Aspects of Computer Science*, number 2215 in Lecture Notes in Computer Science, pages 38–63, Sendai, Japan, 2001. Springer. Contained in [22].
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- [75] J. Boyland and G. Castagna. Type-safe compilation of covariant specialization: a practical case. In Pierre Cointe, editor, *ECOOP '96, 10th European Conference on Object-Oriented Programming*, number 1098 in Lecture Notes in Computer Science, pages 3–25. Springer, 1996.
- [76] G. Castagna and L. Liquori. A typed calculus of objects. In J. Jaffar and R. Yap, editors, *ASIAN '96, 1st Asian Computing Science Conference*, number 1179 in Lecture Notes in Computer Science, pages 129–141. Springer, 1996.
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- [78] G. Castagna.  $F_{\leq}^{\&}$  : integrating parametric and “ad hoc” second order polymorphism. In C. Beeri, A. Ohori, and D. Shasha, editors, *DBPL 4, 4th International Workshop on Database Programming Languages*, Workshops in Computing, pages 335–355, New York City, September 1993. Springer. Contained in [28].
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- [80] G. Castagna, G. Ghelli, and G. Longo. A semantics for  $\lambda$ -early: a calculus with overloading and early binding. In M. Bezem and J.F. Groote, editors, *TLCA '93, International Conference on Typed Lambda Calculi and Applications*, number 664 in Lecture Notes in Computer Science, pages 107–123, Utrecht, The Netherlands, March 1993. Springer.
- [81] G. Castagna, G. Ghelli, and G. Longo. A calculus for overloaded functions with subtyping. In *ACM Conference on LISP and Functional Programming*, pages 182–192, San Francisco, July 1992. ACM Press. Extended abstract of [31].

### Refereed National Journals

- [82] G. Castagna, R. Rousseau, and J.-C. Royer. Fiabilité des langages à objets : le typage est-il suffisant ? *l'Objet*, 4(1), 1998.
- [83] G. Castagna. Le modèle fondé sur la surcharge : une visite guidée. *Technique et Science Informatiques*, 15(6):673–708, June 1996.

### National Conferences with peer reviewing selection

- [84] V. Benzaken, G. Castagna, D. Colazzo, and C. Miachon. Pattern by Example: type-driven visual programming of XML queries. In *Bases de Données Avancées*, 2007. Preliminary version of [53].
- [85] V. Benzaken G. Castagna, D. Colazzo, and K. Nguyễn. Type-based XML projection. In *Bases de données avancées*, 2006. Preliminary version of [56].
- [86] V. Benzaken, G. Castagna, and C. Miachon. A full pattern-based paradigm for XML query processing. In *Bases de Données Avancées*, 2004. Preliminary version of [59].
- [87] J. Vitek and G. Castagna. Mobile computations and hostile hosts. In *Journées Francophones des Langues Applicatifs*, pages 113–132. Editions Hermès, 1999.

- [88] M.-V. Aponte and G. Castagna. Programmation modulaire avec surcharge et liaison tardive. In *Journées Francophones des Langages Applicatifs*, Val Morin, Québec, Canada, 1996.
- [89] G. Castagna. A proposal for making O<sub>2</sub> more type safe. In *Bases de données avancées*. Publié par INRIA Lorraine, 1995.

**International workshops  
on invitation or selection based on peer reviewing**

- [90] G. Castagna, H. Im, K. Nguyễn, and V. Benzaken. Towards a core calculus for XQuery 3.0. In *Data-Centric Programming workshop (co-located with POPL '14)*, January 2014. Electronic proceedings.
- [91] G. Castagna. Tackling parametric polymorphism for XML, 2010. Invited talk at the *Symposium on Computer Science and Novel Technologies*.
- [92] G. Castagna and L. Padovani. A preliminary proposal of decidable testing relations for infinitary asynchronous ccs (position paper). In *INFINITY 2009: 11th International Workshop on Verification of Infinite-State Systems*, 2009. Electronic proceedings.
- [93] G. Castagna and K. Nguyễn. Typed iterators for XML. In *PLAN-X '08, 6th ACM-SIGPLAN Workshop on Programming Language Technologies for XML*, January 2008. Superseded by the ICFP '08 version.
- [94] G. Castagna, N. Gesbert, and L. Padovani. A theory of contracts for web services. In *PLAN-X '07, 5th ACM-SIGPLAN Workshop on Programming Language Technologies for XML*, January 2007. PC selection. Superseded by the version appeared in POPL '08.
- [95] G. Castagna. Milner's encoding revisited: new trends in (sub-)typing the pi-calculus, 2006. Emerging Trends in Concurrency Theory: A Colloquium in Honor of Robin Milner. .
- [96] G. Castagna and A. Frisch. A gentle introduction to semantic subtyping. In *Second workshop on Programmable Structured Documents*, Hakone, Japan, 2004. Invited paper. Published in [37].
- [97] G. Castagna, R. De Nicola, and D. Varacca. Semantic subtyping for the  $\pi$ -calculus. In *Foundation of Global and Ubiquitous Computing*, 2004. PC selection.
- [98] V. Benzaken, G. Castagna, and A. Frisch. CDuce: a white paper. In *PLAN-X '02, Programming Language Technologies for XML*, Pittsburgh, October 2002. PC selection. Preliminary version of [64].
- [99] M. Bugliesi, G. Castagna, and S. Crafa. Boxed Ambients: types and security. In *International Workshop on Concurrency and Coordination*, Lipari, 2001. PC selection.
- [100] M. Bugliesi and G. Castagna. Mobile objects. In *7th Workshop on Foundation of Object-Oriented Languages*, Boston, 2000. PC selection.
- [101] M. Bugliesi and G. Castagna. Secure safe ambients and JVM security. In *IFIP Workshop on Issues in the Theory of Security*, Genève, 2000. PC selection.
- [102] G. Castagna and J. Vitek. Towards a calculus of safe mobile computations. In *IEEE Workshop on Internet Programming Languages*, 1998. PC selection. Extended version published in [25].
- [103] G. Castagna and G. Chen. Dependent types with subtyping and late-bound overloading. In *Workshop on Subtyping, inheritance and modular development of proofs.*, University of Durham, 1997. PC selection. Published in [24].
- [104] G. Castagna. Covariance and contravariance: conflict without a cause. In *Workshop on advance in type systems for computing*, Newton Institute, Cambridge, 1995. PC selection. Published in [29].

- [105] G. Castagna. Second order *ad hoc* polymorphism. In *Workshop on Foundation of Object-Oriented Languages*, Stanford, 1993. Invited paper. Published in [28].
- [106] G. Castagna. The use of overloading in class-based object-oriented languages. In *ANSA workshop on F-bounded quantification*, Cambridge, 1992. PC selection.
- [107] G. Castagna and G. Longo. Type theories and object-oriented programming : some problems, some philosophy (or: a marriage of convenience?). In *5th Jumelage on Typed Lambda Calculus*, Paris, 1991. Invitation.

**User guides, reference manuals, descriptive notes  
of applications or programming languages**

- [108] Giuseppe Castagna, Mickaël Laurent, Kim Nguyễn, and Matthew Lutze. *Prototype for Article: On Type-Cases, Union Elimination, and Occurrence Typing*, 2022. Online interactive version available at <https://typecaseunion.github.io>. Reference Article: <https://doi.org/10.1145/3498674>. Software: <https://doi.org/10.1145/3462306>.
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- [114] J. Boyland and G. Castagna. Parasitic methods for Java 1.02. Compiler patches available at <http://www.di.ens.fr/~castagna>.

**Articles in other journals**

- [115] G. Castagna and G. Leavens. Foundation of object-oriented languages: 2nd workshop report. *SIG-PLAN Notices*, 30(2):5–11, February 1995.

**Submitted articles**

- [116] Giuseppe Castagna. Programming with union, intersection, and negation types. Unpublished manuscript (arXiv:2111.03354), dec 2022.

**Course notes**

- [117] G. Castagna. Soutypage et programmation à objets. Technical report, DEA sémantique, preuves et programmation, ENS, CNAM, Universités Paris VI et Paris VII, 1996. 122 pages.
- [118] V. Benzaken and G. Castagna. Langages de programmation pour bases de données. Technical report, DEA théorie et ingénierie des bases de données, Universités Paris I et Paris XI, 1995.



- [119] G. Castagna. Types, sous-types et programmation orientée objets. In *Ecole Jeunes Chercheurs du GDR Programmation*, Nancy, March 1995.
- [120] G. Castagna. Type systems for object-oriented programming. In *Ecole Jeunes Chercheurs du GDR Programmation*, Toulouse, March 1994.
- [121] G. Castagna and G. Longo. From inheritance to Quest's type theory. In *Ecole Jeunes Chercheurs du GRECO de Programmation*, Sophia-Antipolis (Nice), April 1991.

#### **Dissertations**

- [122] G. Castagna. Types et Modèles : des langages objets séquentiels à la mobilité et à la sécurité. Habilitation à diriger des recherches, Université Paris 7, January 2002.
- [123] G. Castagna. Surcharge, sous-typage et liaison tardive : fondements fonctionnels de la programmation orientée objets. Phd. thesis, Université Paris 7, January 1994. (in English).

#### **Unpublished reports**

- [124] G. Castagna and J. Vitek. Commitment and confinement for the Seal calculus. Rapport de Recherche, Laboratoire d'Informatique, Ecole Normale Supérieure - Paris, 1999.
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#### **Miscellanea**

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