

Reading Course on Type Systems

Fall 2009

Books:

[1] [2] [3] [4] [5] [6]

Papers:

[7] [8] [9] [10] [11] [12] [13] [14] [15]

Courses:

CMU course

<http://www.cs.cmu.edu/~rwh/courses/typesys/>

MPI-SWS course

<http://www.mpi-sws.org/~dreyer/ats/index.html>

TTIC course

<http://ttic.uchicago.edu/~pl/classes/CMSC336-Winter08/>

References

- [1] Jean Y. Girard, Paul Taylor, and Yves Lafont. *Proofs and types*. Cambridge University Press, New York, NY, USA, 1989.
- [2] H. P. Barendregt. Lambda calculi with types. pages 117–309, 1992.
- [3] Robert Harper. Type systems for programming languages, 1996.
- [4] Morten Heine Sorensen and Pawel Urzyczyn. *Lectures on the Curry-Howard Isomorphism, Volume 149 (Studies in Logic and the Foundations of Mathematics)*. Elsevier Science Inc., New York, NY, USA, 2006.
- [5] Benjamin C. Pierce. *Types and programming languages*. MIT Press, Cambridge, MA, USA, 2002.
- [6] Benjamin C. Pierce. *Advanced Topics in Types and Programming Languages*. The MIT Press, 2004.
- [7] John C. Reynolds. Towards a theory of type structure. In *Programming Symposium, Proceedings Colloque sur la Programmation*, pages 408–423, London, UK, 1974. Springer-Verlag.
- [8] Luis Damas and Robin Milner. Principal type-schemes for functional programs. In *POPL '82: Proceedings of the 9th ACM SIGPLAN-SIGACT symposium on Principles of programming languages*, pages 207–212, New York, NY, USA, 1982. ACM.
- [9] John C. Reynolds. Types, abstraction and parametric polymorphism. In *IFIP Congress*, pages 513–523, 1983.

- [10] P. Wadler and S. Blott. How to make ad-hoc polymorphism less ad hoc. In *POPL '89: Proceedings of the 16th ACM SIGPLAN-SIGACT symposium on Principles of programming languages*, pages 60–76, New York, NY, USA, 1989. ACM.
- [11] Philip Wadler. Theorems for free! In *FPCA '89: Proceedings of the fourth international conference on Functional programming languages and computer architecture*, pages 347–359, New York, NY, USA, 1989. ACM.
- [12] M. Abadi, L. Cardelli, B. Pierce, and G. Plotkin. Dynamic typing in a statically-typed language. In *POPL '89: Proceedings of the 16th ACM SIGPLAN-SIGACT symposium on Principles of programming languages*, pages 213–227, New York, NY, USA, 1989. ACM.
- [13] Martín Abadi, Luca Cardelli, Benjamin Pierce, and Gordon Plotkin. Dynamic typing in a statically typed language. *ACM Trans. Program. Lang. Syst.*, 13(2):237–268, 1991.
- [14] Andrew K. Wright and Matthias Felleisen. A syntactic approach to type soundness. *Inf. Comput.*, 115(1):38–94, 1994.
- [15] Simon Peyton Jones, Dimitrios Vytiniotis, Stephanie Weirich, and Mark Shields. Practical type inference for arbitrary-rank types. *J. Funct. Program.*, 17(1):1–82, 2007.