

Publications

Jaap van Oosten

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Book

JAAP VAN OOSTEN. *Realizability: an Introduction to its Categorical Side*, Studies in Logic 152, Elsevier, 2008.

Research papers

1. JAAP VAN OOSTEN.
Lifschitz' Realizability, *Journal of Symbolic Logic*, vol. **55**, n. 2, pp 805–821, 1990.
2. JAAP VAN OOSTEN.
Extension of Lifschitz' realizability to Higher Order Arithmetic, and a solution to a problem of F. Richman, *Journal of Symbolic Logic*, vol. **56**, n. 3, pp 964–973, 1991.
3. JAAP VAN OOSTEN.
A semantical proof of De Jongh's Theorem, *Archives for Mathematical Logic*, vol. **31**, pp 105–114, 1991.
4. JAAP VAN OOSTEN.
Axiomatizing Higher Order Kleene Realizability, *Annals of Pure and Applied Logic*, vol. **70**, pp 87–111, 1994.
5. JAAP VAN OOSTEN.
Two remarks on the Lifschitz realizability topos, *Journal of Symbolic Logic*, vol. **61**, n. 1, pp 70–79, 1996.
6. JAAP VAN OOSTEN.
Extensional realizability, *Annals of Pure and Applied Logic*, vol. **84**, pp 317–349, 1997.
7. JAAP VAN OOSTEN.
The Modified Realizability Topos, *Journal of Pure and Applied Algebra*, vol. **116**, pp 273–289, 1997.

8. JAAP VAN OOSTEN.
Fibrations and Calculi of Fractions, *Journal of Pure and Applied Algebra*, vol. **146**, pp 77–102, 2000.
9. JAAP VAN OOSTEN.
Topological Aspects of Traces. BRICS Report Series RS-95-57, 1995. In: *Applications and Theory of Petri Nets 1996*, Springer LNCS 1091, pp 480–496.
10. JAAP VAN OOSTEN.
A Combinatory Algebra for Sequential Functionals of Finite Type. In: *Models and Computability*, Invited papers from the 1997 Logic Colloquium in Leeds, LMS Lecture Series in Mathematics 259, Cambridge University Press 1999, pp. 389–406
11. JAAP VAN OOSTEN AND ALEX K. SIMPSON.
Axioms and (Counter)examples in Synthetic Domain Theory, *Annals of Pure and Applied Logic*, vol. **104**, pp 233–278, 2000.
12. JAAP VAN OOSTEN.
History and Developments: the first 40 years. In: *Preliminary Proceedings of the Tutorial Workshop on Realizability Semantics and Applications*, *Electronical Notes in Theoretical Computer Science 23*, <http://www.elsevier.nl/locate/entcs>, 1999
13. JAAP VAN OOSTEN.
Realizability: a historical essay, *Mathematical Structures in Computer Science*, vol. **12**, pp 239–263, 2002
14. LARS BIRKEDAL AND JAAP VAN OOSTEN.
Relative and modified relative realizability, *Annals of Pure and Applied Logic*, vol. **118**, pp 115–132, 2002.
15. PIETER HOFSTRA AND JAAP VAN OOSTEN.
Ordered partial combinatory algebras, *Mathematical Proceedings of the Cambridge Phil. Soc.*, vol. **134**, pp 445–463, 2003.
16. JAAP VAN OOSTEN.
A partial analysis of modified realizability, *Journal of Symbolic Logic*, vol. **69** (2004), pp 421–429
17. MARTIN HOFFMAN, JAAP VAN OOSTEN AND THOMAS STREICHER.
Well-foundedness in realizability, *Archive for Mathematical Logic*, vol. **45** (2006), pp 795-805.
18. JAAP VAN OOSTEN.
Filtered Colimits in the Effective Topos, *Journal of Pure and Applied Algebra*, vol. **205** (2006), pp 446-451.

19. CLAIRE KOUWENHOVEN-GENTIL AND JAAP VAN OOSTEN.
Algebraic Set Theory and the Effective Topos, *Journal of Symbolic Logic*, vol. **70-3** (2005), pp 879–890.
20. JAAP VAN OOSTEN.
A general form of relative recursion, *Notre Dame Journal of Formal Logic*, vol. **47** (2006), nr. 3, pp 311-318.
21. JAAP VAN OOSTEN.
Partial Combinatory Algebras of Functions, *Notre Dame Journal of Formal Logic*, vol. **52** (2011), nr. 4, pp. 431-448.
22. JAAP VAN OOSTEN.
A Notion of Homotopy for the Effective Topos, submitted. Available at <http://www.staff.science.uu.nl/~ooste110/realizability/homtpyEff.pdf>
23. BENNO VAN DEN BERG AND JAAP VAN OOSTEN.
Arithmetic is Categorical, note (May 2011). Available at <http://www.staff.science.uu.nl/~ooste110/realizability/arithcat.pdf>
24. SORI LEE AND JAAP VAN OOSTEN.
Basic Subtoposes of the Effective Topos, preprint (November 2011). Available at <http://www.staff.science.uu.nl/~ooste110/realizability/effsubtoposes.pdf>

Lecture Notes

- 1) JAAP VAN OOSTEN.
Recursietheorie [Dutch].
Lecture Notes (71 pp). University of Utrecht, Preprint 802, June 1993, revised 2001.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/recmoeder.ps.gz>
- 2) JAAP VAN OOSTEN.
Basic Category Theory.
Lecture Notes (83 pp). BRICS Lecture Series LS-95-01, 1995, revised 2002.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/catsmoeder.ps.gz>
- 3) JAAP VAN OOSTEN.
Intuitionism.
Mini-course material (15 pp), Aarhus 1995, revised 1996.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/intuitionism.ps.gz>
- 4) JAAP VAN OOSTEN.
Introduction to Peano Arithmetic: Gödel Incompleteness and Nonstandard Models.

Lecture Notes (60 pp). Utrecht, May 1999. *Communications of the Mathematical Institute*, vol. **21–1999**, Utrecht University.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/peanomoeder.ps.gz>

- 5) JAAP VAN OOSTEN.
Model Theory.
Lecture Notes (62 pp). University of Utrecht, 2000.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/modelthmoeder.ps.gz>
- 6) IEKE MOERDIJK AND JAAP VAN OOSTEN.
Sets, Models and Proofs.
Lecture Notes (97 pp). University of Utrecht, 2000, revised 2011.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/logicasyllmoeder.pdf>
- 7) IEKE MOERDIJK AND JAAP VAN OOSTEN.
Topos Theory.
Lecture Notes (71 pp). University of Utrecht, 2007.
Available at <http://www.math.uu.nl/people/jvoosten/syllabi/toposmoeder.pdf>

Reviews

- a) JAAP VAN OOSTEN.
Review of *Sheaves, Games and Model Completions* by S. Ghilardi and M. Zawadowski.
Bulletin of Symbolic Logic, vol. **10** (2004),2,pp 216–217
- b) JAAP VAN OOSTEN.
Review of *Nonstandard Analysis* by J. Ponstein. [*Dutch*]
Nieuw Archief voor Wiskunde, ser. 5, vol. **7**, nr. 3 (september 2006), p. 218
- c) JAAP VAN OOSTEN
Review of *From Sets and Types to Topology and Analysis*, edited by Crosilla and Schuster *Bulletin of Symbolic Logic*, vol. 12 (2006), nr. 4, pp. 611-612
- d) JAAP VAN OOSTEN
Review of *Subsystems of Second Order Arithmetic*, by Stephen Simpson
Nieuw Archief voor Wiskunde, ser. 5, vol. **12**, nr. 3 (september 2011), p. 219