

RĂZVAN DIACONESCU

list of publications

MONOGRAPHS AND TEXTBOOKS

- [1-B] *Institution-independent Model Theory*.
volume of *Studies in Universal Logic* series. Birkhäuser Basel, 2008. (386 pages).
- [2-B] (with K. Futatsugi) *CafeOBJ Report: the language, proof techniques, and methodologies for object-oriented algebraic specification*,
volume 6 of *AMAST Series in Computing*. World Scientific Singapore, 1998. (174 pages)
- [3-B] *Category-based Semantics for Equational and Constraint Logic Programming*.
D.Phil thesis, University of Oxford, 1994. (published as OUCL Monograph PRG-116, 120 pages)

JOURNAL ARTICLES

- [4-J] *Borrowing interpolation*.
Journal of Logic and Computation, Oxford Univ. Press. DOI:10.1093/logcom/exr007
- [5-J] *An axiomatic approach to structuring specifications*.
Theoretical Computer Science, 433:20–42, Elsevier, 2012.
- [6-J] *Interpolation for predefined types*.
Mathematical Structures in Computer Science, 22(1):1–24, Cambridge Univ. Press, 2012.
- [7-J] *Grothendieck inclusion systems*.
Applied Categorical Structures, 19(5):783–802, Springer, 2011.
- [8-J] *Structural Induction in Institutions*.
Information and Computation, 209(9):1197–1222, Elsevier, 2011.
- [9-J] (with I. Ţuţu) *On the Algebra of Structured Specifications*.
Theoretical Computer Science, 412(28):3145–3174, Elsevier, 2011.
- [10-J] *On quasi-varieties of multiple valued logic models*.
Mathematical Logic Quarterly, 57(2):194–203, Wiley, 2011.
- [11-J] *Coinduction for preordered algebras*.
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- [12-J] (with M. Petria) *Saturated models in institutions*.
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- [13-J] *Quasi-Boolean encodings and conditionals in algebraic specification*.
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- [14-J] [An encoding of partial algebras as total algebras.](#)
Information Processing Letters, 109(23-24):1245–1251, Elsevier, 2009.
- [15-J] (with T. Mossakowski and A. Tarlecki) [What is a Logic Translation?](#)
Logica Universalis, 3(1):59–94, Birkhäuser, 2009.
- [16-J] [A categorical study on the finiteness of specifications.](#)
Information Processing Letters, 108(2):75–80, Elsevier, 2008.
- [17-J] (with P. Stefaneas) [Ultraproducts and possible worlds semantics in institutions.](#)
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- [18-J] (with M. Aiguier) [Stratified institutions and elementary homomorphisms.](#)
Information Processing Letters, 103(1):5–13, Elsevier, 2007.
- [19-J] (with M. Petria) [Abstract Beth definability in institutions.](#)
Journal of Symbolic Logic, 71(3):1002–1028, 2006.
- [20-J] [Proof systems for institutional logic.](#)
Journal of Logic and Computation, 16(3):339–357, Oxford Univ. Press, 2006.
- [21-J] [Behavioural specification for hierarchical object composition.](#)
Theoretical Computer Science, 343(3):305–331, Elsevier, 2005.
- [22-J] [Elementary diagrams in institutions.](#)
Journal of Logic and Computation, 14(5):651–674, Oxford Univ. Press, 2004.
- [23-J] [Herbrand theorems in arbitrary institutions.](#)
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- [24-J] [An institution-independent proof of Craig interpolation theorem.](#)
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- [25-J] [Interpolation in Grothendieck institutions.](#)
Theoretical Computer Science, 311:439–461, Elsevier, 2004.
- [26-J] (with P. Stefaneas) [Modality in open institutions with concrete syntax.](#)
Bulletin of the Greek Mathematical Society, 49:91–101, 2004.
- [27-J] (with K. Futatsugi and K. Ogata) [CafeOBJ: logical foundations and methodologies.](#)
Computing and Informatics, 22:257–283, 2003.
- [28-J] [Institution-independent ultraproducts.](#)
Fundamenta Informaticæ, 55(3-4):321–348, IOS Press, 2003.
- [29-J] (with K. Futatsugi) [Logical foundations of CafeOBJ.](#)
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Applied Categorical Structures, 10(4):383–402, Kluwer, 2002.
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- [32-J] [Category-based constraint logics.](#)
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- [33-J] [Extra theory morphisms for institutions: logical semantics for multi-paradigm languages.](#)
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- [34-J] Category-based modularization for equational logic programming.
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- [35-J] Completeness of category-based equational deduction.
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- [36-J] (with J. Goguen) An Oxford survey of order sorted algebra.
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- [39-BC] [Three decades of institution theory.](#)
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- [40-BC] A methodological guide to CafeOBJ logic.
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- [41-BC] [Institutions, Madhyamaka, and universal model theory.](#)
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- [43-BC] (with K. Futatsugi and S. Iida) CafeOBJ jewels.
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- [44-BC] (with S. Iida and K. Futatsugi) Component-based algebraic specification - behavioural specification for component-based software engineering -
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- [45-BC] (with R. Burstall) [Hiding and behaviour: an institutional approach.](#)
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- [47-C] (with M. Martins, A. Madeira and L. Barbosa) Hybridization of Institutions.
In Andrea Corradini, Bartek Klin and Corina Cîrstea editors, *Algebra and Coalgebra in Computer Science*, volume 6859 *Lecture Notes in Computer Science*, pages 283–297, Springer, Berlin Heidelberg, 2011.

- [48-C] Jewels of institution-independent model theory.
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- [49-C] Behavioural specification of hierarchical object composition.
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- [50-C] (with K. Futatsugi and S. Iida) [Component-based algebraic specification and verification in CafeOBJ.](#)
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- [51-C] (with K. Futatsugi, M. Ishisone, A. Nakagawa and T. Sawada) An overview of CafeOBJ.
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- [53-C] A category-based equational logic semantics to constraint programming.
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