Chronological Publications List

D. M. Gabbay, FRSC

April, 2009

Published or Accepted for Publication or Drafts

(Books are indicated in Larger Red Bold Italic font)

1. **Investigations in Modal and Tense Logics with Applications**
   Synthese volume 92, D. Reidel, 1976. 321 pp,
   The main research thrust of this monograph is to present comprehensive methods for proving decidability and undecidability for modal and temporal systems. General theorems are proved on the one hand and new classification and semantical characterisations are given to many logics in order to show that they satisfy these general theorems. Counter examples are constructed to show the limitations of various methods. The book also lays the mathematical and conceptual foundations for non-classical logics.

2. **Semantical Investigations in Heyting's Intuitionistic Logic**
   Synthese volume 148. D. Reidel, 1981. 300 pp,
   This monograph uses semantical methods to study intuitionistic and various neighbouring systems. It develops their mathematical model theory and finite model property and studies their proof theory and interpolation properties. It further applies the methods of book 1, to obtain decidability and undecidability results for intuitionistic algebraic theories. Both research monographs are partially based on, and extend, some of the related research papers.

3. **Semantic Proof of the Craig Interpolation Theorem for Intuitionistic Logic and Extensions, Part I**
   DovPapers/CollectedPapers/003-SPCIT-part1.tex

4. **Semantic Proof of the Craig Interpolation Theorem for Intuitionistic Logic and Extensions, Part II**
   The methods used to prove interpolation in these papers seem to be general enough to be applied in categorial context, as shown by Makkai 25 years later.
   DovPapers/CollectedPapers/004-SPCIT-part2.tex

5. **The Decidability of the Kreisel—Putnam System**
6. Selective Filtration in Modal Logics, Part I  

7. Craig’s Interpolation Theorem for Modal Logics  

8. Decidability Results in Non-Classical Logic III (Systems with Statability Operators)  

   *Journal of Philosophical Logic*, 1, 29—34, 1972.

10. On Decidable Finitely Axiomatizable Modal and Tense Logics without the Finite Model Property, Part I.  

11. On Decidable Finitely Axiomatizable Modal and Tense Logics without the Finite Model Property, Part II.  

12. Tense Systems with Discrete Moments of Time  

13. Model Theory for Intuitionsitic logic  

14. Sufficient Conditions for the Undecidability of Intuitionistic Theories with Applications  

15. Applications of Trees to Intermediate Logics I  

16. Decidability of Some Intuitionistic Predicate Theories  

17. Montague Type semantics for Modal Logics with Propositional Quantifiers  
18. A Survey of Decidability Results for Modal Tense and Intermediate Logics

19. A General Theory of the Conditional In Terms of a Ternary Operator
   *Theoria*, 38, 97—105, 1972.
   DovPapers/019.tex.

20. The Undecidability of Intuitionistic Theories of Algebraically Closed Fields and Real Closed

21. Applications of Scott's Notion of Consequence to the Study of General Binary Intensional Connectives and Entailment

22. Representation of the Montague Semantics as a Form of the Suppes Semantics with Applications to the Problem of the Introduction of the Passive Voice, the Tenses and Negation as Transformations

23. Sameness and Individuation
   DovPapers/023.tex

24. A Sequence of Decidable Finitely Axiomatizable Intermediate Logics with the Disjunction Property (with D. H. de Jongh)

25. On Second Order Intuitionistic Propositional Calculus with Full Comprehension

26. A Generalization of the Concept of Intensional Semantics
27. Branching Quantifiers, English, and Montague Grammar
(with J. M. E. Moravcsik)

28. Tense Logics and the Tenses of English

29. A Normal Logic that is Complete for Neighbourhood Frames but not for Kripke Frames

30. The Decision Problem for Finite Extensions of the Intuitionistic Theory of Abelian Group

31. Decidability Results in Non-Classical Logics I
This paper outlines a general method for proving decidability and undecidability for non-classical logical systems. The method is based on Rabin's results on SwS and uses a variety of semantical and syntactical interpretations. It is the main, most powerful and most extensive method for solving the decision problem in the area of non-classical logics. Related papers which widely extend and develop the methods are 5, 10, 11, 14, 16, 18, 20, 24, 30 & 43.

32. Model Theory of Tense Logics

33. Completeness Properties of Heyting's Predicate Calculus with Respect to RE Models
This paper studies the possibility of providing constructive semantics for intuitionistic and non-classical logics. It shows that results depend very much on formulation. The related paper is 34.

34. On Kreisel's Notion of Validity in Post Systems

35. Craig's Theorem for Intuitionistic Logic III

36. Two Dimensional Propositional Tense Logics

37. On the Semantics and Pragmatics of Specific and Non-specific Indefinite Expressions (with A. Kasher)

38. A New Version of Beth Semantics
39. On the Quantifier there is a Certain X (with A. Kasher)  

40. Improper Definite Descriptions: Linguistic Performance and Logical Spaces (with A. Kasher)  

41. On Some New Intuitionistic Propositional Connectives I  

42. Negation and Denial (with J M E Moravcsik)  

43. Undecidability of Intuitionistic Theories Formulated with the Apartness Relation  

44. A Tense System with Split Truth Table  

45. What is a Classical Connective?  

46. Relative Tenses (with C. Rohrer)  
   File: DovPapers/046/046-RelativeTenses.tex

47. Do we really need Tenses other than Future and Past? (with C. Rohrer)  

48. On the Temporal Analysis of Fairness (with A. Pnueli, S. Shelah and J. Stavi)  
   Outlines the way to use temporal logic as a tool in software engineering, for program specification and verification. It contains results on axiomatization and decision problems and is one of the standard quoted papers in the area.  
   File: DovPapers/048/048-TAF.tex

49. Verbs, Events, and the Flow of Time (with J. M. E. Moravcsik)  
50. An Irreflexivity Lemma with Applications to Axiomatizations of Conditions on Tense Frames


This paper introduces the — what is now known as — Gabbay's Irreflexivity Rule. The idea has been taken onboard and pursued by many authors. Many systems can be formulated without this rule. Its full nature is not yet understood.

File: DovPapers/050/050-ILAACTF.tex

51. Expressive Functional Completeness in Tense Logic


This paper introduces the separation methods of studying expressive power of temporal languages. Besides deep theoretical results and inter—connections with other areas of logic it gives a practical way for any software engineering user of temporal and modal logic to test and adjust the expressive power of his system. Further papers on the expressive properties of temporal logics are 44, 50 & 60.

File: DovPapers/051/051-EFCTL.tex

52. A Note on Systems of N—Dimensional Tense Logics (with F. Guenthner)


53. Intuitionistic Basis for Non-monotonic Logic


This paper started the area now known as the intuitionistic approach to non monotonicity. It is now a chapter in most monographs on the subject. Another paper on this topic is 61.

File: DovPapers/053/053-IBNML.tex

54. N-Prolog: An Extension of Prolog with Hypothetical Implications I (with U. Reyle)


55. Theoretical Foundations for Non-monotonic Reasoning in Expert Systems


This paper, which has had a strong following, proposes an answer to the question: what is a non-monotonic system? It gives axiomatic conditions on the notion of consequence relation, which characterises it as a non-monotonic logic.

Further papers in this area are 53, 61 & 81, 95. This paper started the area now known as 'Axiomatic non-monotonic reasoning'.

File: DovPapers/055/055-TFNMR.tex

56. N-Prolog: An Extension of Prolog with Hypothetical Implications 2


This paper is the first in a series in reformulating classical and non—classical logic in a goal directed way. It initiates the programme, continued in other papers of re—evaluating the notions of logic and proof theory in the light of applications of logic in Information Technology. Further papers are 54, 58, 59, 62, 65, 66, 79 and summarized in 87.

57. Negation as Inconsistency (with M. J. Sergot)


58. What is Negation in a System?


59. Modal and Temporal Logic Programming  
A basic paper showing what the Horn clause fragment of temporal logic looks like and how to identify such fragments in non classical logics. Other related papers are 67 and 84.

60. Preservation of Expressive Completeness in Temporal Models (with A. Amir)  

61. An Intuitionistic Basis for Non-monotonic Reasoning (with M. Clarke)  

62. Direct Deductive Computation on Discourse Representation Structures (with U. Reyle)  

63. Temporal Logic, Tense or Non-tense  
Inaugural Lecture at Imperial College, 17 May 1988.  

64. The Declarative Past and Imperative Future  
Proposes temporal logic as a framework for handling time phenomena in computing. Shows that temporal logic can serve as a unifying background for the declarative and imperative paradigms in programming. The basic intuition it develops, all backed by mathematical logic, is that future statements can be read both declaratively (as describing what will happen) and imperatively as commands to go ahead and make it happen. A specific temporal logic is proposed, its mathematical properties studied and its range of applicability is demonstrated. Further papers are 67 & 68, 70, 73, 76, 82, 83, 84, 90 & 93.

65. A Goal Directed Theorem Prover for Predicate Logic based on Conjunction and Implications (with F. Kriwaczek)  

66. Computation with Run Time Skolemisation (with U. Reyle)  

67. Modal and Temporal Logic Programming II (A Temporal Prolog Machine)  
68. MetateM: A Framework for Programming in Temporal Logic  
   (with H. Barringer, M. Fisher, G. Gough and R. Owens)  
   File: DovPapers/068/068-metatem.tex

69. An Axiomatization of the Temporal Logic with Until and Since over the Real Numbers  (with I. Hodkinson)  

70. The Imperative Future: Past Successes Implies Future Action  
   A survey position paper (with H. Barringer)  

71. Making Inconsistency Respectable Part 1 (with A. Hunter)  

72. Temporal Logic in Context of Databases (with I. Hodkinson)  
   File: DovPapers/072/Copeland.tex

73. Using the Temporal Logic RDL for Design Specifications  
   (with I. Hodkinson and A. Hunter)  

74. Modal Provability Interpretation for Negation by Failure  

75. Credulous vs Sceptical Semantics for Ordered Logic Programs (with E. Laenens and D. Vermeir)  

76. Meta Reasoning in Executable Temporal Logic (with H. Barringer, M. Fisher and A. Hunter)  
   File: DovPapers/076/076-MRETL.tex

77. Temporal Expressive Completeness in the Presence of Gaps  
   (with I. Hodkinson and M. Reynolds)  
78. Labelled Deductive Systems: a position paper
This paper proposes a new logic discipline for unifying the currently used classical and non classical logical system. Since this paper was published, many European researchers and projects are using this framework as a unifying theme. A manuscript of a book exists (for OUP) presenting the results. Subsequent papers are 85, 86, 89 & 98.

79. Algorithmic Proof with Diminishing Resources Part I

80. Logic Finite Automata and Constraint Logic Finite Automata (with Klaus Schulz)

81. Theoretical Foundations for Non-monotonic Reasoning Part II: Structured Non-monotonic Theories

82. Temporal Logics for Real-time Systems (with R. Owens)

83. Temporal Logic and Historical Databases (with P. McBrien)

84. Modal and Temporal Logic Programming III

85. Abduction in Labelled Deductive Systems; a Conceptual Abstract

86. Extending the Curry—Howard Interpretation to Linear, Relevant and other Resource Logics (with R. de Queiroz)

87. Elements of Algorithmic Proof Theory

88. Towards a MEDLAR framework (with R. J. Cunningham and H. J. Ohlbach)
In *Esprit 91*, pp 822—841. Published by the Commission of the EC, 1991.
89. Labelled Deductive Systems and Situation Theory  

90. Adding a Temporal Dimension to a Logical System (with M. Finger)  
   File: DovPapers/090/090-adding.tex

91. Undecidability of Modal and Intermediate Logics with Two Individual Variables (with V. B. Shehtman)  

92. Quantifier Elimination in Second Order Predicate Logic (with H. J. Ohlbach)  
   This is a seminal paper which is now influential in the AI and the Automated Reasoning community. It provides an algorithm for eliminating second order quantifiers. It has a wide range of applications especially in the following form: Given two specification languages L1 and L2 and some axioms on how they interact, the algorithm can automatically extract the projected specification on each language alone. This is strongly related to interpolation. The research is continued in 94.

93. Labelled Database Management Systems, Part 1; Updating Atomic Information (with M. Finger)  

94. From Hilbert Calculus to its Model theoretic Semantics (with H. J. Ohlbach)  

95. General Theory of Structured Consequence Relations  

96. Natural Language Content; a Proof Theoretic Perspective — preliminary report (with R. Kempson)  
   In *Proceedings of The Eighth Amsterdam Colloquium*, pp 173—196. 1991

97. Logic made Reasonable  
   *KI* (German AI Journal), 39—41, 1992. (in German, translated by J. Siekmann)
98. How to Construct a Logic for your Application

99. What is Negation in a System Part II (with H. Wansing)

100. Semantical Correspondence Properties of Some Modal Systems of Logic (with R. Nossum)
   Prize winning paper

101. Temporal Logic in a Stochastic Environment (with P. Harrison & B. Strulo)

102. Labelled Abduction and Relevance Reasoning (with J. Pitt & R. Kempson)

103. Classical vs Non-classical Logic

104. Inconsistency Handling in Multi-perspective Specifications (with A. Finkelstein, A. Hunter, J. Kramer & B. Nuseibeh)

105. Logical Handling of Default and Inconsistent Information (with Ph. Besnard, L. Farinas del Cerro, & A. Hunter)

106. Making Inconsistency Respectable, Part II (with A. Hunter)

108. Restricted Access Logics for Inconsistent Information (with A. Hunter)

109. What is a Logical System?

110. Towards a Computational Treatment of Time (with M. A. Reynolds)

111. Towards Automating Duality (with C. Brink and H. J. Ohlbach)

112. The rule-based systems project: Using confirmation theory and non-monotonic logics for incremental learning (with D. Gillies, A. Hunter, S. Muggleton, Y. Ng and B. Richards)

113. Conditional Logic Programming (with L. Giordano, A. Martelli, N. Olivetti)

114. Information Flow and the Lambek Calculus (with J. Barwise & C. Hartonas)

115. Labelled Deductive Systems and The Informal Fallacies

116. Conditional Implications and Non-monotonic Consequence
This monograph is the standard reference work in the area.

118. Hypothetical updates, Priority and Inconsistency in in a Logic Programming Language (with L. Giordano, A. Martelli and N. Olivetti)

119. Fibred Semantics and the Weaving of Logics, Part 1: Modal and Intuitionistic logic
A revolutionary paper providing methodology for combining systems. Other related papers are 116, 120, 121, 122, 125.

120. Fibred Semantics and the Weaving of Logics, Part 2: Fibring Non-monotonic logics

121. Fibred Semantics for Feature Based Grammar Logic (with J. Dörre and E. König)
Journal of Logic Language and Information, 5, 387—422, 1996,

122. Combining Temporal Logic Systems (with M. Finger)

123. The Functional Interpretation of the Existential Quantifier (with R. de Queiroz)


125. An Overview of Fibred Semantics and The Combination of Logics
126. *Labelled Deductive Systems; Principles and Applications. Vol 1: Basic Principles*
Oxford University Press, 1996. 500pp


*Logic Journal of the IGPL, 229—246, 1996.*

129. The Functional Interpretation of modal necessity (with R. J. G. B. de Queiroz)

130. A Structural Property on Modal Frames Characterizing Default Logic (with G. Amati, L. C. Aiello and F. Pirri)
*Logic Journal of the IGPL, 4*, 7—22, 1996.

131. Fibred Tableaux for Multi-implicational Logic (with M. D'Agostino)

132. How to make your logic fuzzy (preliminary version)

133. A Methodology for Iterated Theory Change (with O. Rodrigues)

134. A language for handling hypothetical updates and inconsistency (with L. Giordano, A. Martelli and N. Olivetti)
File: DovPapers/134/Conditional.tex
135. Grafting Modalities into Substructural Implicational Logics (with M. D'Agostino and A. Russo)


137. Resolution for Classical and Non-classical Logic (with U. Reyle)

138. Information frames, Implication systems and Modalities
   Preliminary version (with M. D'Agostino and A. Russo)

139. Labelled Natural Deduction (with R. de Queiroz)

140. Compromise Update and Revision A position paper

141. Fibring and Labelling: Two methodologies for making modal logic fuzzy

142. On the logic of information flow (with J. Barwise and C. Hartonas)

143. Structured Belief Bases (with O. Rodrigues)

144. Algorithmic proof methods and cut elimination for implicational logics: part 1 Modal Implication (with N. Olivetti)

145. Negation and Contradiction (with A. Hunter)
146. *Elementary Logic: A Procedural Perspective*  

147. Agents in Proactive environments (with R. Nossum and M. Thielscher)  

148. Language understanding: a procedural perspective (with R. Kempson and W. Meyer Viol)  

149. Indefinites as epsilon terms: a labelled deduction account  
(with R. Kempson, W. Meyer Viol and R. Kibble)  

150. Parsing as Tree Construction in LDS (with R. Kempson, and W. Meyer Viol and R. Kibble)  

In *Proceedings of 12th Amsterdam Colloquium*, 1997

152. Crossover: a unified view (with R. Kempson)  

153. Executing Temporal Logic; Review and Prospects (with H. Barringer)  
Previously 703

154. Syntactic Computation as Labelled Deduction: Who, a case study (with W. Meyer Viol and R. Kempson)  

155. VP Ellipsis: towards a dynamic, structural account (with W. Meyer Viol and R. Kempson)  
156. Products of modal logics, part 1 (with V. Shehtman)

157. Soft computing, labels and granualation

158. **Fibring Logics**

159. Fibring Tableaux systems (with B. Beckert)

160. Fibring modal Tableaux (with G. Governatori)
    presented at *Tableaux 1998*, published in

161. Structured contexts with fibred semantics (with R. Nossum)

162. Agents in proactive environment (with R. Nossum and M. Thielscher)
    *Journal of Logic and Computation, 9*, 25—46, 1999

163. Calendar Logic (with H. J. Ohlbach)

164. Ad Baculum is not a Fallacy (with J. Woods)
    In *Proceedings of the Fourth International Conference of the Society for the study of
    argumentation, ISSA 98*, F. H. van Eemeren, Rob Grootendorst, J. Anthony-Blair and C. A. Willard,
    eds. pp 221—224, SIC—SAT 1999.

165. Dealing with label dependent deontic modalities (with G. Governatori)
    In *Norms, Logics and Information Systems. New Studies on Deontic Logic and Computer Science
    (Deon 98)*, P. McNamara Editor, IOS Press, 1998, pp 311-330

166. A unified compilation style labelled deductive system for modal, substructural and fuzzy logic (with K. Broda and A. Russo)
    Springer Verlag, 2000.
    File: 166-CLDS/CLDS.tex
167. Goal oriented proof procedures for intermediate logics (with N. Olivetti)

168. Cut-Free Proof Systems for Logics of Weak Excluded Middle (with A. Ciabattoni and N. Olivetti)

169. Temporal Logic and Quantifier Translations

170. How to make your logic fuzzy, Fibred semantics and the weaving of logics, part 3.

171. Fibring intuitionistic logic programs (with B. Beckert)
To appear in Journal of logic programming. Note the journal of logic programming folded before the paper was published. The entire editorial board resigned in protest.


Oxford University Press, 2000. 600 pages

174. Revision by Translation (with O. Rodrigues and A. Russo)

175. A compiled labelled deductive system for propositional intuitionistic logic (with K. Broda)

176. Un Nuovo Approccio alla Meccanizzazione del Ragionamento Deduttivo [A New Approach to the
Mechanisation of Deductive Reasoning], (with M. D'Agostino, U. Endriss, M. Mondadori, and J. Pitt)

177. WinKE: A Pedagogic Tool for Teaching Logic and Reasoning (abstract) (with M. D'Agostino, U. Endriss, M. Mondadori, and J. Pitt.)


179. Goal Directed Algorithmic Proof Theory (with N. Olivetti)

180. Products of modal logics part 2 (with V. Shehtman)


182. Flow products of modal logics (with V. Shehtman)
File: DovPapers/182/ (Previously 704.)
Draft

183. Naming Worlds in Modal and Temporal Logic (with G. Malod)

184. Self fibring in predicate logics, fibred semantics and the weaving of logics part 4
Previously 706 incorporated into my book Fibring Logics, OUP, 1998, item number 158.

186. Encoding two valued non-classical logic in classical logic
(with H. J. Ohlbach, A. Nonnengart and M. de Rijke)
In Handbook of Automated Deduction Volume 1, J. Alan Robinson and A. Voronkov, eds. MIT
Press, 2001, pp 1403-1486
Previously 708

187. Knowledge Extraction from Trained Neural Networks: a
position paper (with A. S. d'Avila Garcez, K. Broda and A.
F. de Souza)
In Proceedings of 6th IEEE International Conference on Neural Information Processing

188. Non-cooperation in dialogue logic (with J. Woods)
Previously 710a, under the title: Time and Action in Dialogue Logic

189. Hard negotiations between bombastic agents (with J. Woods
and O. Rodrigues)
Previously 710b.
File: 189-Bombastic/Bombastic.tex
In preparation

190. Compiled Labelled Abductive Systems (with K Broda)
Previously 711

191. Eliminating Boolean Expressions Part 1 and Part 2, (with S.
Demri)
In Studia Logica
File: DovPapers/191/.dvi files only (Previously 712)

192. Abduction in Labelled Deductive Systems
Previously 713

193. Provability logic for default reasoning (with G. Amati, L.
Aiello and F. Pirri)
presented at Logic Colloquium 1995.
Previously 714

194. Symbolic knowledge extraction from trained neural networks:
a new approach (with A. S. d'Avila Garcez and K. Broda)
Previously 715
195. Products of Modal Logics Part 3: Products of Modal and Temporal Logics (with V. Shehtman)
   Previously 716.

196. What is a Logical System, 2?
   File: DovPapers/196/717-LS2.tex

197. A Theory of Hypermodal Logics: (Mode Shifting in Modal Logic)
   File: DovPapers/Hypermodal/hypermodal.tex. Also see 197/197MSML.tex (Dov to clarify)

198. Quantum Logic, Hilbert Space and Revision Theory (with K Engesser),
   *AI Journal*, Vol 136 Number 1, March 2002, pp 61-100
   File: DovPapers/198/

199. Cooperate with your Logic Ancestors (with John Woods)

200. Action Time and Default

201. Dynamics of Practical Reasoning: A position paper


203. Goal Directed Mechanisms
   In preparation

204. Interpolation in goal directed proof systems 1 (with N Olivetti)
   File: DovPapers/204/204-interpolation.tex
205. Solving Inconsistencies through Learning (with A. S. d’Avila Garcez and K. Broda)
   Appeared as a chapter in 220.

206. Metalevel Priorities and Neural Networks (with A. S. d'Avila Garcez, and K. Broda)

207. The New Logic (with John Woods),
   File: DovPapers/207-TheNewLogic/TheNewLogic.tex

208. Formal Approaches to Practical Reasoning (with John Woods)
   File: 208-FSPR/FPRS.tex

209. Logic The Practical Turn (with J. Woods, R. Johnson and H. J. Ohlbach)

210. Controlled Revision – A Preliminary Account (with G. Pigozzi and J. Woods)
   File: DovPapers/210/GabbayPigozziWoods.tex


   File: 212-BeliefContraction/Beicon2.tex

213. Existence and Anti-existence in Non-classical logics (with O. Rodrigues) - Delayed
    in preparation

214. Sampling Labelled Deductive Systems
    In Dale Jacquette editor, *Blackwell’s Companion To Philosophical Logic*, Blackwell’s 2002, pp 742-769
215. Combining Probabilistic and Labelled Reasoning

216. More on Non-cooperation in dialogue logic (with John Woods)

217. Logical encoding of the clause graph proof procedures (with Joerg Siekmann)

218. Integrating diverse flows of information using LDS
File: DovPapers/218-Integrating/PwF.tex, in preparation

219. Recursive causality in Bayesian networks and self fibring (with J. Williamson)
File: DovPapers/219-Recursion/219-recursion.tex


221. Interpolation in goal directed proof systems 2 (with N. Olivetti) -Delayed

222. Modal varieties of temporal logic (with H. Barringer)

223. A Theory of Hypermodal Logics: (Mode Shifting in Modal Logic), Part 2
File: DovPapers/Hypermodal/hypermodal2.tex

224. Resource Origins of Non-Monotonicity (with J. Woods)
In studia logica, Vol 88, 2008, pp 85-112
225. Motivating Labelled Natural Deduction

226. A Note on Interpolation by Translation (with S. Schlobach and H. J. Ohlbach)
   File: DovPapers/226-interpolation/226-interpolation.tex

227. Logics of Context (with R. Nossum)

228. Context Dependent Abduction and Relevance (with R. Nossum and J. Woods)

229. Filtration Structures and the Cut Down Problem for Abduction (with J. Woods)

230. Analytic Sequent Calculi for Abelian and Lukasiewicz Logics (with G. Metcalfe and N. Olivetti)
   File: DovPapers/230-Abelian/230-Abelian.tex

231. Belief Contraction, Anti-formulae and Resource Overdraft: Part II (with O. Rodrigues and J. Woods)
   DovPapers/231/

232. Networks in Input Output Logic (with D. Makinson and L. van Torre)
   DovPapers/232Networks/… in preparation

233. Sequent and Hypersequent calculi (with G. Metcalfe and N. Olivetti)
   ACM Transactions on Computational Logic, 6(3), 578-613, 2005.
   Dov: is this the same as number 230? Nicola suggests that this item should be deleted.

234. Goal Directed Calculi for Goedel-Dummett Logics (with G. Metcalfe and N. Olivetti)

24

No file with Jane – asked Garcez for source 20.1.05


238. Interpolation in Goal Directed Systems: The Case of S5 (with N. Olivetti) draft 20.11.02


244. Interpolation in intuitionistic logic programming (with N. Olivetti) In preparation
245. Interpolation theorems for intuitionistic logic using fibred semantics
   In preparation.
   File: DovPapers/245-IFS/245-ifs.tex

246. Halfway between points and intervals. A temporal logic based on ordered trees (with U. Endriss)

247. Fibring neural networks (with A. Garcez)

248. The laws of evidence and labelled deduction (with John Woods)
   Published in Phi-news, pp. 5-46, October 2003. To appear in a Springer volume on logic and law edited by Shahid Rahman

249. Analytic calculi for product logics (with George Metcalfe and Nicola Olivetti)
   Archive for Mathematical Logic, 43(7): 859—889, 2004
   File: DovPapers/249-MOGproduct.tex

250. Fibring as Learning (with A. Garcez)
   In preparation.

251. Restart as a Computational Rule (with M. J. Gabbay and Michael Gabbay)
   Submitted to Special Issue of J. Logic and Computation, August 2004

252. Compiled Labelled Deductive Systems for Modal and Conditional Logics (with K. Broda, L. Lamb and A. Russo)
   Research Studies Press, 350 pages, 2004

253. Fallacies as Cognitive Virtues (with J. Woods)

254. Temporal Dynamics of Argumentation Networks (with J. Woods and H. Barringer)
255. Proof Theory for Propositional Fuzzy Logic (with G. Metcalfe and N. Olivetti)

*Logic Journal of the IGPL*, 13, pp. 561-585, 2005

256. Fuzzy Logic without Weakening (with G. Metcalfe and N. Olivetti)

*Neural Network World*, 2003

257. Proof Theories for Probabilistic Logics (with J. Williamson)

258. Goal-Directed Methods for Lukasiewicz Logic (with G. Metcalfe and N. Olivetti)


259. Hypersequents and Fuzzy Logic (with G. Metcalfe and N. Olivetti)


File: DovPapers/259/259-GMOhypersequents.tex

260. Network Modalities (with H. Barringer and J. Woods)


261. Cross-ratio Uni-norms (with G. Metcalfe)

File: DovPapers/261-CrossRatio/261-crossratio.tex

262. Neural-symbolic intuitionistic reasoning (with A. S. d’Avila Garcez, and L. C. Lamb)


263. Reactive Kripke Semantics and Arc Accessibility


File: DovPapers/263-ReactiveKripke/263-RKS.tex

Earlier version published in *Proceeding of CombLog04*

(http://www.cs.math.ist.utl.pt/comblog04/),
W Carnielli and F M Dionesio and P Mateus Editors, Centre of Logic and Computation University of Lisbon 2004, pp 7-20
264. Fuzzy Logics Based on $[0,1)$-Continuous Uninorms (with G. Metcalfe). Archive for Mathematical Logic 46(6), pages 425-469, 2007

265. Traversing Reactive Graphs (with A. Gibbons)  
File: DovPapers/265-TraversingGraphs/265-trg.tex Paper delayed

266. Abductive Reasoning in Neural Symbolic Systems (with A. d’Avila Garcez, O. Ray and J. Woods)  

267. Towards Connectionist Argumentation Frameworks (with A. d’Avila Garcez and L. Lamb)  
Poster at ECAI 2004.

268. Advice on Abductive Logic (with J. Woods)  
Logic Journal of IGPL 2006 14(2):189-219  
File: DovPapers/268-AAL.tex

269. Argumentation Neural Networks (with A. d’Avila Garcez and L. Lamb)  

270. Cut and Pay (with M. Finger)  
In Journal of Logic, Language and Information vol 15, 2006, pp 195-218  
File: DovPapers/270-CutPay/cutNpay

271. Value Based Argumentation Frameworks as Neural Symbolic Learning Systems (with L. Lamb and A. d’Avila Garcez)  

272. Advice on a Formal Model of Abduction (with J. Woods)  
File: DovPapers/272-AFMA/272-AFMA.tex

Delayed

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   File: DovPapers/275-TempDynm/275-tempdynm.tex

276. Logic and Law (with John Woods)
   Phi News, vol 7 2004 http://www.phinews.ruc.dk/
   Also produced as report for DMC2004
   To appear in a springer volume on logic and law edited by Shahid Rahman

277. The Reach of Abduction (with John Woods)

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279. Interpolation and Definability: A Survey Chapter (with L. Maksimova)
   Handbook of Philosophical Logic, Volume 15 (2nd edn), Springer

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   International Journal of Theoretical Physics, 45(4), 698-723, April 2006.

281. Voting and logical revision (with G. Pigozzi and O. Rodrigues)


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   To appear in a Springer volume on logic and law edited by Shahid Rahman

284. Connectionist Non-classical Logics: Distributed Reasoning & Learning in Neural Networks (with A. S. D’Avila Garcez and L. C. Lamb)
   Springer-Verlag. 2008

   Springer, 2007, 500pp
286. *Proof Planning* (with J. Siekmann et al.)
Draft available.

287. *Proof theory for Fuzzy logics* (with G. Metcalfe and N. Olivetti)
Springer 2008

288. *Quantum Logic* (with K. Engesser and D. Lehmann)
College publications 2008, 190 pp

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College publications 2008, 316 pp

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File: DovPapers/292/nonAnalyticCuts.tex

293. *Second-order Quantifier Elimination in Higher-order Contexts with Applications to the Semantical Analysis of Conditionals* (with A. Szalas),
*Studia Logica* Volume 87, Number 1 / October, 2007, pp 37-50

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   Delayed

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   to appear in a LNCS volume in Honour of Yakov Choueka, Springer. N Dershovitz editor

304. Reactive Automata (with Maxime Crochmore)
   Submitted to Information and Computation

305. How to Make Your Logic Probabilistic
   Delayed

306. Theory of Reactive Graphs (with Sergio Marcelino)
   File: DovPapers/306-ReactiveGraphs/306-ReactiveGraphs.tex

307. First-order Belief Change (with George Kourousias, David Makinson and Odinaldo Rodrigues) Delayed
   File: DovPapers/307-FOBC/307-FOBC.tex

308. Logic for AI and Information Technology
   College Publications 2007, 580 pp
309. Belief Revision in Non-classical Logic II (with Odinaldo Rodrigues and Alessandra Russo)
File: DovPapers/309/BRNCLII.pdf.

310. Belief Revision (with Odinaldo Rodrigues and Alessandra Russo)
File: DovPapers/310/belief_revision.ps

311. A logical framework for monitoring and evolving software components (with David Rydeheard and Howard Barringer)
File: DovPapers/311/submitted.pdf. Source requested from Howard

312. From Runtime Verification to Evolvable Systems (With Howard Barringer and David Rydeheard)
File: DovPapers/312/submitted.pdf. Source requested from Howard

313. Cut-Based Abduction (with M. D’Agostino and M. Finger),

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   *Logic Journal of the IGPL*, 2009, Vol 1, pp 1-54

327. Roadmap for Preferential Logics (with K. Schlechta)
   *Journal of Applied Non-classical Logics* Volume No. 19/1, pages 7 to 59, 2008

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Logic Journal of the IGPL, Volume 11, Number 6 2003, pp. 597—613

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340. Kal Vachomer and Non Deductive Reasoning (In Hebrew, with M. Abraham and U. Schild), 111 pp

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in HANDBOOK OF QUANTUM LOGIC AND QUANTUM STRUCTURES: QUANTUM LOGIC pp 587-623

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Under contract with Springer. 2009
Unpublished Technical Research Reports
(referenced in the published literature)

1. Montague Type Semantics for Non-classical Logic

2. Axiomatization of Logic Programs
   text of letter to V Pratt, Nov 1977.

3. The Separation Theorem for Temporal Logic
   Report DFG Project RO/245/12, 1981, University of Stuttgart, pp 73.

4. The Tübingen Lectures, on the logics of practical reasoning

Books In Preparation
(current draft available or in planning)


2. Labelled Deductive Systems; principles and applications. Vol 2: Further Developments
   Oxford University Press, in preparation.

3. The Functional Interpretation (with Ruy de Queiroz and Anjolina Grisi de Oliveira), Delayed
   150 page draft available. To appear with World Scientific.

4. Formal Models of Practical Reasoning
   Partial draft available

5. Two books on Kal Vachomer, in Hebrew and in English (with M Abraham and U Schild, based on 338 and 340)

6. Epsilon Symbols in non-classical logics (with W. Meyer-Viol), Delayed

7. Voting and Logical Revision (with G. Pigozzi and O. Rodrigues)
   under contract with World Scientific

8. Interpolation vol 2 (with Larisa Maksimova)
9. *The Leverhulme Lectures in Logics*

10. *Principles of non deductive logic*
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   Springer Verlag Lecture Notes in Artificial Intelligence, vol 1085, 719 pp.

2. **Qualitative and Quantitative Practical Reasoning, FAPR 97** (with R. Kruse, A. Nonnengart and H. J. Ohlbach)
   Springer 1997, LNAI 1244.

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5. **Temporal Logic, ICTL '94—First International Conference** (Joint editor with H. J. Ohlbach)


7. **WOCFAI 91 Proceedings of the First International Conference on The Foundations of Artificial Intelligence**. (With Michel De Glass)

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9. **Proceedings FROCOS 98** (with Martin de Rijke)


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    Kluwer 2004
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Handbooks of Logic

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   * 18 volumes second edition in preparation,
   Kluwer Publishing Group.
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   Oxford University Press
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   Volume 2: Background Computational Structures
   Volume 3: Semantic Structures
   Volume 4: Semantic Modelling
   Volume 5:
   2000, 535pp,
   NOW BEING TRANSLATED INTO RUSSIAN

3. Handbook of Logic in Artificial Intelligence and Logic Programming (with C. Hogger and J. A. Robinson)
   Oxford University Press
   Volume 1: Logical Foundations
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   NOW BEING TRANSLATED INTO RUSSIAN

   Volume 1
   Qualitative and Quantitative Reasoning (P. Smets, volume editor)
   Volume 2
5. **Handbook of Tableaux** (with M. D'Agostino, R. Heinele and J. Possega).
Kluwer 1999—pp 670

6. **Handbook of Logic of Argument and Inference: The Turn Toward the Practical** (with H. J. Ohlbach, J. Woods and R. Johnson)

7. **Handbook of Temporal Reasoning in AI** (co-editor with Lluis Vila I. Grabul and M. Fisher)
Elsevier 2005 731pp

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Elsevier
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   College Publications 2009

11. **Handbook of Philosophical Logic, 2nd edition**
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    - **Volume 13**: 2005, 373 pp
    - **Volume 14**: 2007
    - **Volume 15**: 2009

    *Subsequent volumes still in preparation*

    Kluwer-Springer Publishing Group.

12. **Handbook of Quantum Logic (with K. Engesser and D. Lehmann)**
    3 volumes, in preparation. Elsevier

    Vol 1 Quantum Structures, 2007, 820 pp
    Vol. 2 Quantum Logic, 2009, 725 pp

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    *Logics for the 21st Century Mathematical Problems from Applied Logic*
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    3 volumes with Springer
    v. 1 (International Mathematical Series) (Hardcover), 2005, 348 pp
    v. 2 (International Mathematical series) (Hardcover) 2007, 354 pp
Edited Special Issues of Journals

1. **Logic and language**
   Special double issue with R. Kempson for *JOLLI*, vol 5, 1996, nos 3—4

2. **Combining Logics**
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   by Dov Gabbay (Editor), Ruth Kempson (Editor)

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   Oxford University Press, founder and Life Editor in Chief.

   Elsevier Amsterdam,

    Elsevier Amsterdam.

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    (Executive editor with V. Hendricks and S. A. Pedersen).
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