

# Cristian S. Calude

## *Publications*<sup>1</sup>

### 1 Papers in Refereed Journals

1. A. Akhtarzada, C. S. Calude, J. Hosking. A multi-criteria metric algorithm for recommender systems, *Fundamenta Informaticae*, 2011, accepted.
2. C. S. Calude, J. P. Lewis. Is there a universal image generator? *Applied Mathematics and Computation*, 2011, doi: 10.1016/j.amc.2011.06.35.
3. A. Abbott, C. S. Calude, K. Svozil. A quantum random number generator certified by value indefiniteness, *Mathematical Structures in Computer Science*, 2011, accepted.
4. C. S. Calude, K. Salomaa, T. K. Roblot. State-size hierarchy for FS-complexity, *International Journal of Foundations of Computer Science*, 2011, accepted.
5. C. S. Calude, A. Nies, L. Staiger and F. Stephan. Universal recursively enumerable sets of strings, *Theoretical Comput. Sci.*, accepted 2011, DOI: 10.1016/j.tcs.2011.01.002.
6. C. S. Calude, M. Cavaliere, R. Mardare. An observer-based de-quantisation of Deutsch's Algorithm, *International Journal of Foundations of Computer Science* 22, 1 (2011), 191–202.
7. C. S. Calude, E. Calude and K. Svozil. The complexity of proving chaoticity and the Church-Turing Thesis, *Chaos* 20 037103 (2010), 1–5.
8. C. S. Calude, N. J. Hay, F. Stephan. Representation of left-computable  $\varepsilon$ -random reals, *Journal of Computer and System Sciences*, 77 (2011), 812–819.
9. C. S. Calude, M. J. Dinneen, M. Dumitrescu, K. Svozil. Experimental evidence of quantum randomness incomputability, *Physical Review A*, 82, 022102 (2010), 1–8.
10. C. S. Calude, L. Staiger. A note on accelerated Turing machines, *Mathematical Structures in Computer Science*, 20 (2010), 1011–1017. DOI: 10.1017/S0960129510000344.
11. C. S. Calude, E. Calude. The complexity of the Four Colour Theorem, *LMS J. Comput. Math.* 13 (2010), 414–425.
12. C. S. Calude. Simplicity via provability for universal prefix-free Turing machines, *Theoretical Comput. Sci.*, 412 (2010), 178–182. DOI: 10.1016/j.tcs.2010.08.002.
13. C. S. Calude, E. Calude. Evaluating the complexity of mathematical problems. Part 2, *Complex Systems* 18 (2010), 387–401.
14. C. S. Calude, G. J. Chaitin. What is ... a halting probability? *Notices of the AMS* 57, 2 (2010), 236–237.
15. C. S. Calude, M. Zimand. Algorithmically independent sequences, *Information and Computation* 208 (2010), 292–308.
16. C. S. Calude, E. Calude. Evaluating the complexity of mathematical problems. Part 1, *Complex Systems* 18 (2009), 267–285.
17. C. S. Calude, N. J. Hay. Every computably enumerable random real is provably computably enumerable random, *Logic Jnl. IGPL* 17 (2009,) 325–350, DOI:10.1093/jigpal/jzp015.
18. C. S. Calude, H. Jürgensen and L. Staiger. Topology on words, *Theoretical Comput. Sci.* 410 (2009), 2323–2335.

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<sup>1</sup>July 18, 2011; in cooperation with 125 colleagues from 29 countries.

19. C. S. Calude and L. Staiger. On universal computably enumerable prefix codes, *Mathematical Structures in Computer Science* 19 (2009), 45–57.
20. C. S. Calude, K. Svozil. Quantum randomness and value indefiniteness, *Advanced Science Letters* 1 (2008), 165–168.
21. C. S. Calude, M. A. Stay. Most programs stop quickly or never halt, *Advances in Applied Mathematics*, 40 (2008), 295–308.
22. C. S. Calude. De-quantising the solution of Deutsch’s problem, *International Journal of Quantum Information* 5, 4(2007), 1–7.
23. C. S. Calude, M. J. Dinneen. Exact approximations of omega numbers, *Int. Journal of Bifurcation & Chaos* 17, 6 (2007), 1937–1954.
24. C. S. Calude, G. J. Chaitin. A dialogue on mathematics & physics, *The Rutherford Journal: The New Zealand Journal for the History and Philosophy of Science and Technology*, Vol. 2, 2006–2007, [www.rutherfordjournal.org](http://www.rutherfordjournal.org).
25. C. S. Calude, M. A. Stay. Natural halting probabilities, partial randomness, and Zeta functions, *Information and Computation* 204 (2006), 1718–1739.
26. C. S. Calude, E. Calude, M. J. Dinneen. A new measure of the difficulty of problems, *Journal for Multiple-Valued Logic and Soft Computing* 12 (2006), 285–307.
27. C. S. Calude, C. Câmpeanu, M. Dumitrescu. Automata recognizing no words: A statistical approach, *Fundamenta Informaticae* 72 (2006), 1–18.
28. C. S. Calude, L. Staiger, S. A. Terwijn. On partial randomness, *Annals of Applied and Pure Logic*, 138 (2006), 20–30.
29. C. S. Calude, M. A. Stay. From Heisenberg to Gödel via Chaitin, *International Journal of Theoretical Physics* 44, 7 (2005), 1053–1065.
30. C. S. Calude, H. Jürgensen. Is complexity a source of incompleteness? *Advances in Applied Mathematics* 35 (2005), 1–15.
31. C. S. Calude, L. Staiger, K. Svozil. Randomness relative to Cantor expansions, *Communications in Nonlinear Science and Numerical Simulation*, 10/8 (2005), 921–930.
32. C. S. Calude, S. Rudeanu. Proving as a computable procedure, *Fundamenta Informaticae* 64, 1–4 (2005), 43–52.
33. C. S. Calude, L. Staiger. Generalisations of disjunctive sequences, *Math. Log. Quart.* 51, 2 (2005), 120–128.
34. C. S. Calude, E. Calude, S. Marcus. Passages of proof, *Bull. Eur. Assoc. Theor. Comput. Sci.* 84 (2004), 167–188. Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 89–102.
35. C. S. Calude, G. Păun. Bio-steps beyond Turing, *BioSystems* 77 (2004), 175–194.
36. C. S. Calude, J. Casti. The jumble cruncher, *New Scientist*, 25 September 2004, 36–37.
37. J. J. Arulanandham, C. S. Calude, M. J. Dinneen. A fast natural algorithm for searching, *Theoret. Comput. Sci., Natural Computing* 320, 1 (2004), 3–13.
38. C. S. Calude, E. Calude, M. J. Dinneen. What is the value of *Taxicab*(6)?, *J. UCS* 9, 10 (2003), 1196–1203.
39. C. S. Calude, S. Marcus, L. Staiger. A topological characterization of random sequences, *Inform. Process. Lett.* 88 (2003), 245–250. (MR2014322 (2005b:68146)) Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 357–364.

40. J. J. Arulanandham, C. S. Calude, M. J. Dinneen. Solving SAT with bilateral computing, *Romanian Journal of Information Science and Technology* 6, 1-2 (2003), 9–18.
41. C. S. Calude. Incompleteness, complexity, randomness and beyond, *Minds and Machines: Journal for Artificial Intelligence, Philosophy and Cognitive Science* 12, 4 (2002), 503–517. Italian version: Incompletezza, complessità, casualità e oltre, in G. Lolli, and U. Pagallo (eds.). *La Complessità Di Gödel*, Giappichelli Editore, 2008, 7–29.
42. C. S. Calude, M. J. Dinneen and C.-K. Shu. Computing a glimpse of randomness, *Experimental Mathematics* 11, 2 (2002), 369–378. (MR 2004a:68047)
43. C. S. Calude, M. Dumitrescu. Entropic measures, Markov information sources and complexity, *Appl. Math. Comput.* 132, 2–3 (2002), 369–384. (MR 2003j:94047)
44. C. S. Calude, B. Pavlov. Coins, quantum measurements, and Turing’s barrier, *Quantum Information Processing* 1, 1–2 (2002), 107–127. (MR 1964322)
45. C. S. Calude, E. Calude. The bridge crossing problem, *Bull. Eur. Assoc. Theor. Comput. Sci.* 77 (2002), 180–190. (MR 1920334)
46. C. S. Calude. Chaitin  $\Omega$  numbers, Solovay machines and incompleteness, *Theoret. Comput. Sci.* 284 (2002), 269–277. (MR 2003f:68059)
47. C. S. Calude, K. Salomaa, S. Yu. Additive distance and quasi-distances between words, *J. UCS* 8, 2 (2002), 141–152. (MR 2003d:68117)
48. J. J. Arulanandham, C. S. Calude, M. J. Dinneen. Bead-sort: a natural sorting algorithm, *Bull. Eur. Assoc. Theor. Comput. Sci.* 76 (2002), 153–162. (MR 1901178)
49. C. S. Calude. A characterization of c.e. random reals, *Theoret. Comput. Sci.* 271 (2002), 3–14. (MR 2002m:68051)
50. C. S. Calude, H. Ishihara, T. Yamaguchi. Minimal programs are almost optimal, *International Journal of Foundations of Computer Science* 12, 4 (2001), 479–489. (MR 2003d:68102)
51. C. S. Calude. Real numbers: from computable to random, *Studia Universitatis Babeş-Bolyai, Philosophia*, XLVI, 1–2 (2001), 3–24.
52. C. S. Calude, P. Hertling, B. Khossainov, Y. Wang. Recursively enumerable reals and Chaitin  $\Omega$  numbers, *Theoret. Comput. Sci.* 255 (2001), 125–149.
53. C. S. Calude, G. Păun, M. Tătărâm. A glimpse into natural computing, *J. Multi Valued Logic* 7 (2001), 1–28.
54. C. S. Calude, E. Calude, T. Chiu, M. Dumitrescu, R. Nicolescu. Testing computational complementarity for Mermin automata, *J. Multi Valued Logic* 6 (2001), 47–65. (MR 2002a:68067)
55. C. S. Calude, P. Hertling, H. Jürgensen, K. Weihrauch. Randomness on full shift spaces, *Chaos, Solitons & Fractals* 12/3 (2001), 491–503. (MR 2001m:68130)
56. C. S. Calude, M. J. Dinneen, K. Svozil. Reflections on quantum computing, *Complexity* 6, 1 (2000), 35–37. (MR 1808342)
57. C. S. Calude, G. Păun. Computing with cells and atoms in a nutshell, *Complexity* 6, 1 (2000), 38–48. (MR 1808343)
58. C. S. Calude, E. Calude, B. Khossainov. Finite nondeterministic automata: simulation and minimality, *Theoret. Comput. Sci.* 242, 1–2 (2000), 219–235. (MR 2001h:68075)
59. C. S. Calude, M. Lipponen. Computational complementarity and shift spaces, *Chaos, Solitons & Fractals* 11 (2000), 315–319. (MR 2000i:68097)
60. C. S. Calude, G. J. Chaitin. Randomness everywhere, *Nature* 400, 22 July (1999), 319–320.

61. C. S. Calude, F. W. Meyerstein. Is the universe lawful? *Chaos, Solitons & Fractals* 10, 6 (1999), 1075–1084.
62. C. S. Calude, P. H. Hertling, K. Svozil. Embedding quantum universes into classical ones, *Foundations of Physics* 29, 3 (1999), 349–379. (MR 2000j:81021)
63. D. Bridges, C. Calude, B. Pavlov, D. Ştefănescu. The inverse function theorem: a constructive approach, *Chaos, Solitons & Fractals* 10, 6 (1999), 927–934. (MR 2000f:03185)
64. C. Calude, S. Marcus, D. Ştefănescu. The Creator versus its creation. From Scotus to Gödel, *Collegium Logicum. Annals of the Kurt Gödel Society*, Vol. 3, Institute of Computer Science, AS CR Prague, Vienna, 1999, 1–10. Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 117–126.
65. C. S. Calude, T. Zamfirescu. Most numbers obey no probability laws, *Publicationes Mathematicae Debrecen*, Tome 54 Supplement (1999), 619–623. (MR 2000i:28010)
66. C. S. Calude, J. L. Casti. Silicon, molecules, or photons? *Complexity* 4, 1, (1998), 13.
67. C. S. Calude, E. Calude, C. Ştefănescu. Computational complementarity for Mealy automata, *Bull. Eur. Assoc. Theor. Comput. Sci.* 66 (1998), 139–149. (MR 99f:68136)
68. C. S. Calude, P. Hertling. Computable approximations of reals: an information–theoretic analysis, *Fundamenta Informaticae* 33 (1998), 1–16. (MR 2000b:03162)
69. C. S. Calude, J. L. Casti. Parallel thinking, *Nature* 392, 9 April (1998), 549–551.
70. C. S. Calude, J. L. Casti, P. B. Gibbons, M. Lipponen. Unconventional models of computation: a conventional report, *Complexity* 3, 4 (1998), 8–11. (MR 1618378)
71. C. S. Calude, P. H. Hertling, K. Svozil. Kochen–Specker theorem: two geometric proofs, *Tatra Mt. Math. Publ.* 15 (1998), 133–142. (MR 99i:81020)
72. C. Calude, T. Zamfirescu. The typical number is a lexicon, *New Zealand Journal Math.* 27 (1998), 7–13. (MR 99f:03086)
73. C. S. Calude. A genius’s story: two books on Gödel. The life and works of a master logician, *Complexity* 3, 2 (1997), 1–5. (MR 99a:01019)
74. C. S. Calude, A. Nies. Chaitin  $\Omega$  numbers and strong reducibilities, *J. UCS* 3 (1997), 1161–1166. (MR 99i:03049)
75. C. S. Calude, I. Tomescu. Optimum extendible prefix codes, *J. UCS* 3 (1997), 1167–1179. (MR 2000e:94032)
76. C. Calude, E. Calude, B. Khossainov. Deterministic automata: simulation, universality and minimality, *Annals of Applied and Pure Logic* 90, 1–3 (1997), 263–276. (MR 2001h:68075)
77. C. Calude, P. Hertling, B. Khossainov. Do the zeros of Riemann’s zeta–function form a random sequence? *Bull. Eur. Assoc. Theor. Comput. Sci.* 62 (1997), 199–207.
78. C. Calude, E. Calude, K. Svozil, S. Yu. Physical versus computational complementarity I, *International Journal of Theoretical Physics* 36 (1997), 1495–1523. (MR 98i:81029)
79. C. Calude, S. Yu. Language-theoretic complexity of disjunctive sequences, *Discrete Appl. Mathematics* 80 (1997), 199–205. (MR 99a:68105)
80. C. Calude. The finite, the unbounded and the infinite, *J. UCS* 2 (1996), 242–244.
81. C. Calude, C. Grozea. Kraft–Chaitin inequality revisited, *J. UCS* 2 (1996), 306–310. (MR 97c: 68070)
82. C. Calude. Algorithmic information theory: open problems, *J. UCS* 2 (1996), 439–441. (MR 97f: 68080)

83. C. Calude, C. Câmpeanu. Are binary codings universal?, *Complexity* 1, 15 (1996), 47–50. (MR 97a: 68086)
84. C. Calude, M. Zimand. Effective category and measure in abstract complexity theory, *Theoret. Comput. Sci.* 154 (1996), 307–327. (MR 97a: 68060)
85. A. Arslanov, C. Calude. Program-size complexity computes the halting problem, *Bull. Eur. Assoc. Theor. Comput. Sci.* 57 (1995), 199–200. [Another solution by G. J. Chaitin]
86. C. Calude. What is a random string? *J. UCS* 1,1 (1995), 48–66.
87. C. Calude, M. Tătărăm. Three theories of computational complexity. Extended abstract, *An. Univ. Iași, Inf.* 3 (1994), 45–52.
88. C. Calude, H. Jürgensen, M. Zimand. Is independence an exception?, *Appl. Math. Comput.* 66 (1994), 63–76. (MR 96c: 03113, Zbl 822# 03024)
89. D. S. Bridges, C. Calude. On recursive bounds for the exceptional values in speed-up, *Theoret. Comput. Sci.* 132 (1994), 387–394. (MR 95f: 03059, Zbl 807#03026)
90. C. Calude, C. Câmpeanu. Note on the topological structure of random strings, *Theoret. Comput. Sci.* 112 (1993), 383–390. (MR 94d: 68081, Zbl 781#68073)
91. C. Calude, G. Istrate, M. Zimand. Recursive Baire classification and speedable functions, *Z. Math. Logik Grundlang. Math.* 3 (1992), 169–178. (MR 94j: 03083, Zbl 798#03042)
92. C. Calude. Algorithmic complexity: a topological point of view, *Singularité* 2, 10 (1991), 28–29. [With a comment and a list of open problems due to the editor] (in French)
93. C. Calude. Relativized topological size of sets of partial recursive functions, *Theoret. Comput. Sci.* 87 (1991), 347–352. (MR 92h: 03060, Zbl 814#0303)
94. C. Calude, G. Istrate. Determining and stationary sets for some classes of partial recursive functions, *Theoret. Comput. Sci.* 82 (1991), 151–155. (MR 92g: 03065, Zbl 723#03024)
95. C. Calude, L. Sântean. On a theorem of Günter Asser, *Z. Math. Logik Grundlang. Math.* 36 (1990), 143–147. [With a comment by G. Asser] (MR 91h: 03049, Zbl 687#03019, 698#03031)
96. C. Calude, E. Kurta. On Kraft–Chaitin inequality, *Rev. Roumaine Math. Pures Appl.* 35 (1990), 597–604. (MR 92C: 94004, Zbl 731#68056)
97. C. Calude, I. Chițescu. Qualitative properties of P. Martin-Löf random sequences, *Boll. Unione Mat. Ital.* VII, Ser. B3, 240 (1989), 229–240. (MR 91a: 68147, Zbl 674#03013)
98. C. Calude, I. Chițescu. Upper limitation of Kolmogorov complexity and universal P. Martin-Löf tests, *Journal of Computational Mathematics* 1 (1989), 61–70. (MR 91a: 68147, Zbl 673#68028)
99. C. Calude, S. Marcus. Sudan’s recursive and non-primitive recursive function: a retrospective look, *An. Univ. București, Mat.-Inf.* 2 (1989), 25–30. (MR 92a: 03060, Zbl 741#03020)
100. C. Calude, I. Chițescu. Random sequences: some topological and measure-theoretical properties, *An. Univ. București, Mat.-Inf.* 2 (1988), 27–32. (MR 89m: 60004, Zbl 688#60001)
101. C. Calude, I. Chițescu. Random sequences according to P. Martin-Löf, *Found. Control Engrg.* 12, 3 (1987), 75–84. (MR 89e: 58059, Zbl 632#03041)
102. C. Calude. Super-exponentials non-primitive recursive, but rudimentary, *Inform. Process. Lett.* 25 (1987), 311–315. (MR 88j: 03026, Zbl 632#03036)
103. C. Calude. Note on Ehrenfeucht’s conjecture and Hilbert’s basis theorem, *Bull. Eur. Assoc. Theor. Comput. Sci.* 29 (1986), 18–22.
104. Ș. Buzeteanu, C. Calude. Functions having the graph in the  $n$ -th Grzegorzcyk class, *Found. Control Engrg.* 11 (1986), 61–67. (MR 88f: 03034, Zbl 625#03020)

105. C. Calude, I. Chițescu, L. Staiger. P. Martin-Löf tests: representability and embeddability, *Rev. Roumaine Math. Pures Appl.* 30 (1985), 719–732. (MR 88i: 68043, Zbl 587#03032)
106. C. Calude, I. Chițescu. A combinatorial characterization of sequential P. Martin-Löf tests, *Internat. J. Comput. Math.* 17 (1985), 53–64. (Zbl 562#03020)
107. C. Calude, M. Zimand. A relation between correctness and randomness in the computation of probabilistic algorithms, *Internat. J. Comput. Math.* 16 (1984), 47–53. (MR 86e: 68052, Zbl 552#68051)
108. C. Calude, I. Chițescu. A class of universal P. Martin-Löf tests, *EACTS Bull.* 23 (1984), 15–22.
109. C. Calude, I. Chițescu. Representability of recursive P. Martin-Löf tests, *Kybernetika* (Prague) 19 (1983), 526–536. (MR 85h: 03040, Zbl 529#03021)
110. C. Calude. A simple non-uniform operation, *Bull. Eur. Assoc. Theor. Comput. Sci.* 20 (1983), 40–46.
111. C. Calude, E. Calude. On some discrete metrics, *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N. S.)* 27 (75) (1983), 213–216. (MR 85f: 54057, Zbl 539#54019)
112. C. Calude, Gh. Păun. Independent instances for some undecidable problems, *RAIRO Inform. Theor.* 17 (1983), 49–54. (MR 85d: 03087, Zbl 517#03022)
113. C. Calude. On a class of independent problems related to Rice theorem, *ACM SIGACT News* 15 (1983), 53–57. (Zbl 535#03020)
114. C. Calude, M. Tătărăm. Universal sequences of primitive recursive functions, *Rev. Roumaine Math. Pures Appl.* 28 (1983), 381–389. (MR 85c: 03016, Zbl 535#03017)
115. C. Calude, I. Chițescu. On representability of P. Martin-Löf tests, *Kybernetika* (Prague) 19 (1983), 42–47. (MR 85h: 03040, Zbl 529#03020)
116. C. Calude. Topological size of sets of partial recursive functions, *Z. Math. Logik Grundlang. Math.* 28 (1982), 455–462. (MR 85i: 03134, Zbl 495#03022)
117. C. Calude, I. Chițescu. On Per Martin-Löf random sequences, *Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.)* 26 (74) (1982), 217–221. (MR 84g: 03073, Zbl 495#03026)
118. C. Calude, I. Chițescu. Random strings according to A. N. Kolmogorov and P. Martin-Löf. Classical approach, *Found. Control Engrg.* 7 (1982), 73–85. (MR 84h: 60008, Zbl 521#03024)
119. C. Calude, I. Chițescu. Strong noncomputability of random strings, *Internat. J. Comput. Math.* 11 (1982), 43–45. (MR 83h: 68066, Zbl 486#03026)
120. C. Calude. Note on a hierarchy of primitive recursive functions, *Rev. Roumaine Math. Pures Appl.* 27 (1982), 935–936. (MR 85b: 03065, Zbl 495#03027)
121. C. Calude, E. Calude. A metrical method for multicriteria decision making, *St. Cerc. Mat.* 34 (1982), 223–234. (in Romanian) (Zbl 523#90004)
122. C. Calude, Gh. Păun. On the adequacy of a grammatical model of the brain, *Rev. Roumaine Ling.* 27 (1982), 343–351. (Romanian Contributions to the XIII-th International Congress of Linguistics, Tokyo, 1982, Section Linguistics and the Computer)
123. M. Andrașiu, C. Calude, Gh. Păun. Possibilities of multicriteria decision making, *St. Cerc. Mat.* 34 (1982), 87–103. (in Romanian) (Zbl 505#90004)
124. C. Calude, V. Vieru. An iterative normal form for the partial recursive functions, *Found. Control Engrg.* 6 (1981), 133–144. (MR 85b: 03064, Zbl 503#68034)
125. C. Calude, Gh. Păun. Global syntax and semantics for recursively enumerable languages, *Fund. Inform.* 4 (1981), 245–254. (MR 83h: 68133, Zbl 473#68068)

126. C. Calude. Darboux property and primitive recursive functions, *Rev. Roumaine Math. Pures Appl.* 26 (1981), 1187–1192. (MR 84h: 03100, Zbl 481#03028)
127. C. Calude, V. Vieru. A note on Knuth’s iterated powers, *An. Știin. Univ. “Alex.I.Cuza”, Iași, Sect. I Mat.* 27 (1981), 253–255. (MR 84m: 03062, Zbl 473#03035)
128. C. Calude, E. Calude. On the “rationality” of Onicescu’s method for multicriteria making, *Rev. de Statistică* 30 (1981), 58–60. (in Romanian)
129. C. Calude, S. Marcus. Man-computer communication, *Rev. Roumaine Ling.* 26 (1981), 103–112.
130. C. Calude, Gh. Păun. The absence of contextual ambiguities in programming languages, *Rev. Roumaine Ling. Cahiers Ling. Theor. Appl.* 18 (1981), 91–110.
131. M. Andrașiu, C. Calude, Gh. Păun. Some extensions of the multicriteria decision problem, *Rev. de Statistică* 29 (1980), 43–49. (in Romanian)
132. C. Calude, S. Marcus, I. Țevy. Recursive properties of Sudan function, *Rev. Roumaine Math. Pures Appl.* 25 (1980), 503–507. (MR 81f: 03053, Zbl 444#03021) Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 103–108.
133. C. Calude, S. Marcus, I. Țevy. The first example of a recursive function which is not primitive recursive, *Historia Math.* 9 (1979), 380–384. (MR 80i: 03053, Zbl 426#03042)
134. C. Calude, V. E. Căzănescu. On topologies generated by Moisil resemblance relations, *Discrete Math.* 25 (1979), 109–115. (MR 80i: 54003, Zbl 412#54010)
135. C. Calude, S. Marcus, Gh. Păun. The universal grammar as a hypothetical brain, *Rev. Roumaine Ling.* 27 (1979), 479–489. Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 421–432.
136. C. Calude. Categorical methods in computability theory II, *St. Cerc. Mat.* 30 (1978), 361–383. (in Romanian) (MR 80m: 03110a, Zbl 405#03025)
137. C. Calude. Categorical methods in computability theory I, *St. Cerc. Mat.* 30 (1978), 253–277. (in Romanian) (MR 80m: 03110b, Zbl 381#03028)
138. C. Calude, B. Fântâneau. On recursive, non-primitive recursive functions, *Bull. Math. Soc. Sci. Math. R. S. Roumanie* 22 (1978), 255–258. (MR 80b: 03052, Zbl 399#03025)
139. C. Calude. On the category of recursive languages, *Mathematica (Cluj)* 19 (42), (1978), 29–32. (MR 80b: 03056, Zbl 384#03029)
140. C. Calude. A grammatical construction of Gödel numberings, *C. R. Acad. Sci. Paris Ser. I Math.* 284 (1977), 525–526. (in French) (MR 55#87, Zbl 347#02026)
141. C. Calude. On the compatibility between the analytic and generative hierarchies of formal languages, *Rev. Roumaine Math. Pures Appl.* 22 (1977), 437–439. (MR 56#7334, Zbl 358#68105)
142. C. Calude. On some topological properties of semilattice ordered semigroups, *Bull. Math. Soc. Sci. Math. R. S. Roumanie* 19 (1976), 3–10. (MR 56#15523, Zbl 347#06020)
143. C. Calude. An axiomatics for a deontic logic with an infinity of truth values, *Rev. Roumaine Math. Pures Appl.* 21 (1976), 267–273. (in French) (MR 53#7728, Zbl 347#02019)
144. C. Calude. On the metrizable of a free monoid, *Discrete Math.* 15 (1976), 307–310. (MR 58#22347, Zbl 337#68053)
145. C. Calude. On contextual distances in mathematical linguistics, *St. Cerc. Mat.* 28 (1976), 31–35. (in Romanian) (MR 53#12092, Zbl 339#68050)
146. C. Calude. Some arguments against the formal character of programming languages, *Rev. Roumaine Ling.-Cahiers Ling. Theor. Appl.* 13 (1976), 257–264. (in French)

147. C. Calude, S. Marcus, I. Ţevy. On recursive functions which are not recursive primitive, *Rev. Roumaine Sci. Soc., Sér. Phil.-Logique* 19 (1975), 185–188. (in French)
148. C. Calude. A statistical experiment in Assembler 360, *Cahiers Ling. Theor. Appl.* 11 (1974), 219–230. (in French)
149. C. Calude. On a class of distances in a free semigroup, *Bull. Math. Soc. Sci. Math. R. S. Roumanie* 17 (65) (1973), 123–133. (in French) (MR 51#7372, Zbl 302#68096)
150. C. Calude. On some morphological aspects of the language Assembler 360, *Cahiers Ling. Theor. Appl.* 10 (1973), 153–162. (in French) (Zbl 281#68032)

## 2 Papers in Refereed Conference Proceedings

1. A. A. Abbott, C. S. Calude. Von Neumann normalisation and symptoms of randomness: An application to sequences of quantum random bits, in C. S. Calude, J. Kari, I. Petre, G. Rozenberg (eds.). *Proc. 10th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 6714, Springer, Heidelberg, 2011, 40–51.
2. C. S. Calude, M. J. Dinneen, M. Dumitrescu, K. Svozil. Experimental evidence of quantum randomness incomputability, in H. Guerra (ed.). *Physics and Computation 2010, Pre-Proceedings*, CAMIT, University of Azores, 2010, 127–145.
3. C. S. Calude, K. Salomaa, T. K. Roblot. Finite-state complexity and the size of transducers, in I. McQuillan and G. Pighizzini (eds.). *12th International Workshop on Descriptive Complexity of Formal Systems (DCFS 2010)*, EPTCS 26, 2010, pp. 38–47, DOI:10.4204/EPTCS.31.6.
4. C. S. Calude, K. Salomaa, T. K. Roblot. Finite-state complexity and randomness, in F. Ferreira, H. Guerra, E. Majordomo, J. Rasga (eds.). *Programs, Proofs, Processes, 6th Conference on Computability in Europe, CiE 2010, Abstract and Handbook Booklet*, Ponta Delgada, Azores, Portugal, University of Azores, 2010, 73–82.
5. A. A. Abbott, C. S. Calude. Understanding the quantum computational speed-up via dequantisation, in S. B. Cooper, E. Kashefi, P. Panangaden (eds.). *Developments in Computational Models (DCM 2010)* EPTCS 26, 2010, pp. 1–12, DOI:10.4204/EPTCS.26.1.
6. C. S. Calude, C. Müller. Formal proof: reconciling correctness and understanding, in L. Dixon et al. (eds.). *Proceedings Calculemus/MKM 2009*, LNAI 5625, Springer, 2009, 217–232.
7. C. S. Calude. Simplicity via provability for universal prefix-free Turing machines, in T. Neary, D. Woods, A. K. Seda and N. Murphy (eds.). *The Complexity of Simple Programs 2008*, EPTCS 1, 2009, pp. 16–21, DOI:10.4204/EPTCS.1.2. (preliminary version in T. Neary, D. Woods, A. Seda, N. Murphy (eds.). *Proc. International Workshop on The Complexity of Simple Programs*, Cork, Ireland, 2008, 15–22.) (invited).
8. C. S. Calude. Information: the algorithmic paradigm, in G. Sommaruga (ed.) *Formal Theories of Information*, Lecture Notes Comput. Sci. 5363, Springer (2009), 79–94. (invited)
9. C. S. Calude. Can Peano Arithmetic Prove Randomness?, in M. Ito (ed.). *Workshop on Automata, Formal Languages and Algebraic Systems*, Kyoto, September 2008, 5pp. (invited).
10. C. S. Calude, A. Nies, L. Staiger and F. Stephan. Universal recursively enumerable sets of strings, in M. Ito, M. Toyama (eds.). *Developments in Language Theory (DLT'08)*, Lectures Notes in Comput. Sci. 5257, Springer-Verlag, Berlin, 2008, 170–182.
11. C. S. Calude. Incompleteness and complexity, in C. Câmpeanu, G. Pighizzini (eds.). *Proceedings of the International Workshop DCFS'08*, UPEI, Charlottetown, Canada, 14–24. (invited)
12. C. S. Calude, M. J. Dinneen. Is quantum randomness algorithmic random? A preliminary attack, in S. Bozapalidis, A. Kalampakas, G. Rahonis (eds.). *Proceedings 1st International Conference on Algebraic Informatics*, Aristotle University of Thessaloniki, October, 2005, 195–196. (invited)

13. C. S. Calude. Algorithmic randomness, quantum physics, and incompleteness, in M. Margenstern (ed.). *Proceedings of the Conference "Machines, Computations and Universality" (MCU'2004)*, Lectures Notes in Comput. Sci. 3354, Springer, Berlin, 2005, 1–17. (invited)
14. C. S. Calude. Dialogues on quantum computing, in C. Martin-Vide, V. Mitrana and G. Păun (eds.). *Formal Languages and Applications*, Physica-Verlag, Heidelberg, 2004, 493–506.
15. C. S. Calude. Who is afraid of randomness?, in E. von Collani (ed.). *'Defining the Science of Stochastics'*, Heldermann Verlag, Sigma Series in Stochastics 1, 2004, 95–116. (Pre-proceedings: in E. von Collani (ed.). *Millennial Symposium 'Defining the Science of Stochastics'*, Wuerzburg University, 2000, 99–122) (invited)
16. C. S. Calude, E. Calude. Automata: from uncertainty to quantum, in W. Kuich, G. Rozenberg, A. Salomaa (eds.) *Developments in Language Theory (DLT'01)*, Lectures Notes in Comput. Sci. 2295, Springer-Verlag, Berlin, 2002, 1–14. Preproceedings published by the Institute für Algebra un Computermathematik, Technische Universtät Wien, Austria, 2001, 1–16. (MR 2004a:68063)
17. C. S. Calude, K. Salomaa, S. Yu. Metric lexical analysis, in O. Boldt, H. Jürgensen (eds.) *Automata Implementation*, Lectures Notes in Computer Science 2214, Springer-Verlag, Heidelberg, 2001, 48–59. Prepublication in O. Boldt, H. Jürgensen, L. Robbins (eds.) *Workshop on Implementing Automata'99 (WIA'99)*, *Preproc.*, 17–19 July, 1999, Potsdam, Universtität Potsdam, Institut für Informatik, Germany, 1999, VI-1–12.
18. C. S. Calude, E. Calude, P. Kay. Liars, demons and chaos, in M. Ito, G. Păun, S. Yu (eds.). *Words, Semigroups, and Transductions*, World Scientific, Singapore, 2001, 33–46. (MR 2003d:03004)
19. C. S. Calude. A glimpse into algorithmic information theory, in L. Cavedon, P. Blackburn, N. Braisby, A. Shimojima (eds.). *Logic, Language and Computation*, Vol. 3, CSLI Series, CSLI Lectures Notes 111, Stanford, 2000, 67–83. (MR 2002g:68055)
20. C. S. Calude, E. Calude. Bisimulations and behaviour of nondeterministic automata, in G. Rozenberg, W. Thomas (eds.) *Developments in Language Theory. Foundations, Applications, and Perspectives*, World Scientific, Singapore, 2000, 60–70. Prepublication in W. Thomas (ed.) *DLT'99, Developments in Language Theory, Fourth International Conference, Preproc.*, 6–9 July, 1999 Aachen, Germany, Aachener Informatik-Berichte 99–5, 129–139. (MR 2003e:68059)
21. C. S. Calude. A characterization of c.e. random reals, in J. Dassow, D. Wotschke (eds.) *International Workshop on Descriptive Complexity of Automata, Grammars and Related Structures (DCAGRS'99)*, *Preproc.*, 20–23 July, Magdeburg, Germany, 1999, 89–98.
22. C. S. Calude, E. Calude, K. Svozil. Quantum correlations conundrum: an automaton-theoretic approach, in C. Martin-Vide, Gh. Păun (eds.) *Recent Topics in Mathematical and Computational Linguistics*, The Publishing House of the Romanian Academy, Bucharest, 2000, 55–67. Prepublication in O. Boldt, H. Jürgensen, L. Robbins (eds.) *Workshop on Implementing Automata'99 (WIA'99)*, *Preproc.*, 17–19 July, 1999, Potsdam, Universtität Potsdam, Institut für Informatik, Germany, VII-1–12.
23. C. S. Calude, P. H. Hertling. Computable approximations of reals: an information-theoretic analysis, Extended abstract, *Third International Conference on Information-Theoretic Approaches to Logic, Language, and Computation*, Hsi-tou, Taiwan, The Centre for Research in Cognitive Science & Department of Psychology, National Chung Cheng University, Chiayi, 1998, 29–38.
24. C. S. Calude, M. Lipponen. Computational complementarity and sofic shifts, in X. Lin (ed.). *Theory of Computing 98, Proceedings of the 4th Australasian Theory Symposium, CATS'98*, Springer-Verlag, Singapore, 1998, 277–290.
25. C. S. Calude, P. Hertling, B. Khossainov, Y. Wang. Recursively enumerable reals and Chaitin  $\Omega$  numbers, in M. Morvan, C. Meinel, D. Krob (eds.). *STACS'98, Proceedings of the 15th*

- Annual Symposium on Theoretical Aspects of Computer Science, Paris, 1998*, Lecture Notes Comput. Sci. 1373, Springer-Verlag, Berlin, 1998, 596–606. (MR 99h:68089)
26. C. Calude, E. Calude, B. Khossainov. Deterministic automata: simulation, universality and minimality, Extended abstract, in S. Bozapalidis (ed.). *Proceedings of the 3rd International Conference “Developments in Language Theory”*, Aristotel University of Thessaloniki, Thessaloniki, Greece, 1997, 519–520.
  27. C. Calude, H. Maurer, A. Salomaa. The Journal of Universal Computer Science and its applications to teaching, in G. Kadunz, H. Kautschitsch, G. Ossinmitz, E. Schneider (eds.). *Trends und Perspektiven, Beiträge Zum 7. Internationalen Symposium Zur “Didaktik der Mathematik”*, Klagenfurt, 26–30 September 1994, Verlag Hölder-Pichler-Tempsky, Vienna, 1996, 255–261. (invited)
  28. C. Calude, S. Yu. Language-theoretic complexity of disjunctive sequences, in M. E. Houle, P. Eades (eds.), *Proceedings CATS’96 (Computing: the Australian Theory Seminar)*, Melbourne, Australia, 29–30 January 1996, 175–179.
  29. C. Calude, M. Zimand. Effective category and measure in abstract complexity theory: extended abstract, *Proceedings FCT’95*, Lecture Notes Comput. Sci. 965, Springer-Verlag, Berlin, 1995, 156–171. (MR 1459175)
  30. C. Calude, H. Jürgensen. Randomness and coding, in M. Marinov, D. Ivanchev (eds.). *20th Summer School “Applications of Mathematics in Engineering, Proceedings*, Varna, Bulgaria, 1994, Technical University of Sofia, 1995, 53–57.
  31. C. Calude. What is a random string? (extended abstract), in W. Depauli-Schimanovich, E. Koehler, F. Stadler (eds.). *The Foundational Debate, Complexity and Constructivity in Mathematics and Physics*, Kluwer, Dordrecht, 1995, 101–113. (invited) (MR 1757744)
  32. C. Calude, D. I. Campbell, K. Svozil, D. Ștefănescu. Strong determinism vs. computability, in W. Depauli-Schimanovich, E. Koehler, F. Stadler (eds.). *The Foundational Debate, Complexity and Constructivity in Mathematics and Physics*, Kluwer, Dordrecht, 1995, 115–131. (MR 1757745)
  33. C. Calude, H. Jürgensen. Randomness as an invariant for number representations, in H. Maurer, J. Karhumäki, G. Rozenberg (eds.). *Results and Trends in Theoretical Computer Science*, Springer-Verlag, Berlin, 1994, 44–66. (invited) (Zbl 950 # 22464, MR 96f:11100)
  34. C. Calude, A. Salomaa. Algorithmically coding the universe, in G. Rozenberg, A. Salomaa (eds.). *Developments in Language Theory*, World Scientific, Singapore, 1994, 472–492.
  35. C. Calude. Borel normality and algorithmic randomness, in G. Rozenberg, A. Salomaa (eds.). *Developments in Language Theory*, World Scientific, Singapore, 1994, 113–129. (invited)
  36. C. Calude. On B. Russell definition of mathematics, *Proc. National Symposium Info-Iași’89*, 52–59. (in Romanian) (invited)
  37. C. Calude, D. Vaida. Ehrenfeucht test set theorem and Hilbert basis theorem: a constructive glimpse, in A. Kreczmar, G. Mirkowska (eds.), *Proc. Symposium Math. Found. Computer Sci. 1989*, Lecture Notes Comput. Sci. 379, Springer-Verlag, Berlin, 1989, 177–184. (MR 90m: 68009, Zbl 732#03043)
  38. C. Calude, D. Vaida. Languages, effectivity and constructive mathematics, *Proc. Second National Colloquium on Languages, Logic and Mathematical Linguistics*, Brașov, 1988, 47–57. (MR 90g: 03061, Zbl 667#03036)
  39. C. Calude. Romanian results in recursive function theory: 1927–1987, *Proc. Computer Center Anniversary Symposium*, Bucharest University, 1987, 16–22. (in Romanian) (invited)
  40. C. Calude, D. Vaida. Ehrenfeucht’s property and constructivity, *Proc. National Symposium Info-Iași’87*, 1–16. (in Romanian) (invited)

41. C. Calude, I. Chițescu, L. Staiger. P. Martin-Löf tests: representability and embeddability, *Proc. National Symposium Info-Iași'85*, Vol. I, 80–88. (in Romanian) (invited)
42. C. Calude. Dilemmas of computational complexity, in C. Iacob (ed.). *Mathematics, Today and Tomorrow*, Ed. Academiei, Bucharest, 1985, 63–73. (in Romanian) (invited)
43. C. Calude, I. Chițescu. On a (too) general theory of random sequences, in M. G. Demetrescu, M. Iosifescu (eds.). *Studies in Probability Theory and Related Topics, Papers in Honour of Octav Onicescu on His 90th Birthday*, Nagard Publisher, 1983, 65–69. (MR 85m: 0005, Zbl 562#03021) (invited)
44. C. Calude. On a class of independent problems related to Rice's theorem, *Proc. National Symposium Info-Iași'83*, 29–32. (in Romanian)
45. C. Calude, I. Chițescu. On Per Martin-Löf random sequences, *Proc. National Symposium Info-Iași'81*, 1–5. (in Romanian)
46. C. Calude, V. Vieru. Knuth test on compiler efficiency, *Proc. 4th International Conference on Control Systems and Computer Science*, Bucharest, Politechnical Institute, Vol. IV, 1981, 113–115.
47. C. Calude, Gh. Păun. An argument for the formal character of the programming language Fortran, in P. Miclău, S. Marcus (eds.). *Sémiotique Roumaine*, Bucharest University, 1981, 61–72.
48. C. Calude, M. Malița, On the category of Čech topological spaces, in A. Czaszar(ed.). *Topology*, Vol. I, North-Holland, Amsterdam, 1980, 225–232. (MR 82e: 54012, Zbl 444#54001)
49. C. Calude, S. Marcus, Gh. Păun. The universal grammar as a hypothetical brain, *Proc. Intern. Symposium on Mathematics in System Theory*, Brașov, 1978, 93–114. (Zbl 457#68093)
50. C. Calude. Pompeiu's distance between closed sets, *Symposium on Geometry and Global Analysis*, Bucharest, 1973, Ed. Academiei, Bucharest, 281–288. (in Romanian) (MR 58#10123, Zbl 397#54015)
51. C. Calude. Semiotic analysis of a morphological experiment in a programming language, in S. Chatman, U. Eco, J. M. Klinkenberg (eds.). *Approaches to Semiotics*, Proc. of the First Congress IAS, 1973, Mouton, The Hague, 1979, 433–436. (in French)

### 3 Papers in Refereed Collective Books

1. C. S. Calude. Randomness everywhere: My path to algorithmic information theory, in H. Zenil (ed.). *Randomness Through Computation*, World Scientific, Singapore, 2011, 179–189.
2. C. S. Calude, J. L. Casti, G. J. Chaitin, P. C. W. Davies, K. Svozil, S. Wolfram. Is the universe random? in H. Zenil (ed.). *Randomness Through Computation*, World Scientific, Singapore, 2011, 309–350.
3. C. S. Calude, G. J. Chaitin, E. Fredkin, A. T. Legget, R. de Ruyter, T. Toffoli, S. Wolfram. What is computation? (How) Does nature compute? in H. Zenil (ed.). *Randomness Through Computation*, World Scientific, Singapore, 2011, 351–403.
4. C. S. Calude, M. J. Dinneen, A. M. Gardner. Opening the book of randomness, in R. Copeland (ed.). *DIASPAR. A Mapping of Randomness*, 2010.
5. C. S. Calude, E. Calude, S. Marcus. Proving and programming, in C. S. Calude (ed.). *Randomness & Complexity, from Leibniz to Chaitin*, World Scientific, Singapore, 2007, 310–321.
6. V. A. Adamyan, C. S. Calude, B. S. Pavlov. Transcending the limits of Turing computability, in T. Hida, K. Saitô, S. Si (ed.). *Quantum Information Complexity. Proceedings of Meijo Winter School 2003*, World Scientific, Singapore, 2004, 119–137.

7. C. S. Calude, S. Marcus. Mathematical proofs at a crossroad? in J. Karhumäki, H. Maurer, G. Păun, G. Rozenberg (eds.). *Theory Is Forever*, Lectures Notes in Comput. Sci. 3113, Springer-Verlag, Berlin, 2004, 15–28. Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 89–102.
8. J. J. Arulanandham, C. S. Calude, M. J. Dinneen. Balance machines: Computing = balancing, in N. Jonoska, G. Păun, G. Rozenberg (eds.). *Aspects of Molecular Computing*, Lectures Notes in Comput. Sci. 2933, Springer-Verlag, Berlin, 2003, 36–47.
9. C. S. Calude, L. Staiger. Generalisations of disjunctive sequences, in V. Bratka, M. Schröder, K. Weihrauch, N. Zhong (eds.). *Computability and Complexity in Analysis*, Informatik Berichte 302-8 FernUniversität in Hagen, 2003, 153–162.
10. C. S. Calude, B. Pavlov. The Poincaré–Hardy inequality on the complement of a Cantor set, in D. Alpay, I. Gohberg, V. Vinnikov (eds.). *Interpolation Theory, Systems Theory and Related Topics*, Operator Theory: Advances and Applications, Vol. 134, Birkhäuser Verlag, Basel, 2002, 187–208.
11. C. S. Calude, E. Calude, P. Kay. Liars, demons and chaos, in M. Ito, G. Păun, S. Yu (eds.). *Words, Semigroups, and Transductions*, World Scientific, Singapore, 2001, 33–46. (MR 2003d:03004)
12. C. S. Calude, E. Calude, K. Svozil. Computational complementarity for probabilistic automata, in C. Martin-Vide, V. Mitrană (eds.). *Where Mathematics, Computer Science, Linguistics and Biology Meet*, Kluwer, Amsterdam, 2001, 99–113. (MR 1890684)
13. C. S. Calude, H. Jürgensen, S. Legg. Solving finitely refutable mathematical problems, in C. S. Calude, G. Păun (eds.). *Finite Versus Infinite. Contributions to an Eternal Dilemma*, Springer-Verlag, London, 2000, 39–52. (MR 2001h:03025)
14. C. S. Calude, R. J. Coles. Program-size complexity of initial segments and domination relation reducibility, in J. Karhumäki, H. A. Maurer, G. Păun, G. Rozenberg (eds.). *Jewels Are Forever*, Springer-Verlag, Berlin, 1999, 225–237. (invited) (MR 2000m:68079)
15. C. S. Calude, R. Coles, P. H. Hertling and B. Khossainov. Degree-theoretic aspects of computably enumerable reals, in S. B. Cooper, J. K. Truss (eds.). *Models and Computability*, Cambridge University Press, Cambridge, 1999, 23–39. (MR 2001b:03043)
16. C. Calude. Computability and information, in E. Craig (ed.). *Routledge Encyclopedia of Philosophy*, Routledge, London, Vol. 2 (1998), 477–482. (invited)
17. C. Calude, J. Hromkovič. Complexity: a language-theoretic point of view, in G. Rozenberg, A. Salomaa (eds.). *Handbook of Formal Languages*, Vol. II, Springer-Verlag, Berlin, 1997, 1–60. (invited) (MR 98k:68072)
18. C. Calude, H. Maurer. Pocket mathematics, in Gh. Păun (ed.). *Mathematical Aspects of Natural and Formal Languages*, Scientific World, Singapore, 1994, 13–41. (invited)
19. C. Calude, I. Chițescu. Complexity: a source of randomness, *Modern Problems in Mathematical Research*, Vol.1, Bucharest University, Bucharest, 1990, 165–202. Also in C. Calude (ed.). *How to Cope with Complexity*, Ed. Academiei, Bucharest, 1993, 34–57. (in Romanian)
20. C. Calude. Meanings and texts: an algorithmic metaphor, in M. Balat, J. Deledalle-Rhodes (eds.). *Signs of Humanity*, Mouton de Gruyter, 1992, 95–97.
21. C. Calude, Gh. Păun. On the adequacy of a grammatical model of the brain, in M. Drăgănescu (ed.). *Artificial Intelligence and Robotics*, Ed. Academiei, Bucharest, 1983, 45–50. (in Romanian)
22. C. Calude, Gh. Păun. The absence of contextual ambiguities in the programming languages Fortran and Assiris, in S. Marcus (ed.). *Contextual Ambiguities in Natural and Artificial Languages*, Comm. & Cognition, Vol. 2, Ghent, Belgium, 1983, 57–76.

23. C. Calude, S. Marcus, Gh. Păun. Empirical Information and Theoretical Constructs in the Study of Needs II, in S. Marcus (ed.). *Mathematical Methods in the Development Problematique*, Ed. Academiei, Bucharest, 1982, 39–59. (in Romanian) (MR 83k: 92005)
24. C. Calude, C. Ș. Calude. Mathematical modeling and systemic approach in juridical sciences, in M. Malița (ed.). *Systems in Social Sciences*, Ed. Academiei, Bucharest, 1977, 105–109. (in Romanian)

## 4 Books

1. C. S. Calude. *Information and Randomness: An Algorithmic Perspective*, 2nd Edition, Revised and Extended, Springer-Verlag, Berlin, 2002, 490 pp. Forewords by G. Chaitin and A. Salomaa. (MR 1995845)
2. C. S. Calude, G. Păun. *Computing with Cells and Atoms*, Taylor & Francis Publishers, London, 2001, 336 pp. (MR 2002e:68020)
3. C. S. Calude. *Constructive Mathematics*, Ed. științifică, Bucharest, 1995, 123 pp. (in Romanian)
4. C. Calude. *Theories of Computational Complexity*, Annals of Discrete Mathematics 35, North-Holland, Amsterdam, 1988, 500 pp. (MR 89g: 03057, Zbl 633#03034)
5. C. Calude. *Computational Complexity. Qualitative Aspects*, Ed. științifică și enciclopedică, Bucharest, 1982, 300 pp. (in Romanian) (Zbl 619#03029)
6. C. Calude. *True, but Unprovable*, Ed. științifică și enciclopedică, Bucharest, 1988, 110 pp. (in Romanian) (Zbl 654#03001)
7. C. Calude, Gh. Păun. *The Mathematical Model: Tool and Viewpoint*, Ed. științifică și enciclopedică, Bucharest, 1982, 140 pp. (in Romanian)
8. C. Calude. *What Are the Programming Languages ?*, Ed. științifică și enciclopedică, Bucharest, 1978, 100 pp. (in Romanian)

## 5 Edited Books

1. C. S. Calude, J. Kari, I. Petre, G. Rozenberg (eds.). *Proc. 10th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 6714, Springer, Heidelberg, 2011, 247 pp.
2. C. S. Calude, G. Rozenberg, A. Salomaa (eds.). *Rainbow of Computer Science*, Springer, Lecture Notes Comput. Sci. 6570, Springer, Heidelberg, 2011, 285 pp.
3. C. S. Calude, V. Sassone (eds.). *TCS 2010. Proceedings of the 6th IFIP International Conference on Theoretical Computer Science*, Springer, Heidelberg, 2010, 398 pp.
4. C. S. Calude, M. Hagiya, K. Morita, G. Rozenberg (eds.). *Proc. 9th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 6079, Springer, Heidelberg, 2010, 194 pp.
5. C. S. Calude, J. F. Costa, N. Dershowitz, E. Freire, G. Rozenberg (eds.). *Proc. 8th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 5715, Springer, Heidelberg, 2009, 297 pp.
6. L. Beznea, V. Brănzănescu, C. S. Calude, H. Ene, M. Iosifescu, S. Marcus, R. Purice, D. Timotin (eds.). *Proceedings of the Sixth Congress of Romanian Mathematicians, Bucharest 2007*, Vol. 1, Scientific Contributions, Editura Academiei Române, Bucharest, 2009, 605 pp.
7. C. S. Calude, J. F. Costa, R. Freund, M. Oswald, G. Rozenberg (eds.). *Proc. 7th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 5204, Springer, Heidelberg, 2008, X, 259 pp.

8. C. S. Calude (ed.) *Randomness & Complexity, from Leibniz to Chaitin*, World Scientific, Singapore, 2007, 480pp.
9. S. G. Akl, C. S. Calude, M. J. Dinneen, G. Rozenberg, H. T. Wareham (eds.). *Proc. 6th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 4618, Springer, Heidelberg, 2007, 241 pp.
10. C. S. Calude, M. J. Dinneen, G. Păun, G. Rozenberg, S. Stepney (eds.). *Proc. 5th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 4135, Springer, Heidelberg, 2006, 270 pp.
11. C. S. Calude, M. J. Dinneen, M. J. Pérez Jiménez, G. Păun, G. Rozenberg (eds.). *Proc. 4th International Conference Unconventional Computation*, Lecture Notes Comput. Sci. 3699, Springer, Heidelberg, 2005, 266 pp.
12. C. S. Calude, E. Calude, M. J. Dinneen (eds.). *Proc. 8th International Conf. Developments in Language Theory, DLT'04*, Lecture Notes Comput. Sci. 3340, Springer, Heidelberg, 2004, 442 pp.
13. C. Calude, M. Dinneen, V. Vajnovski (eds.). *Proc. 4th International Conf. DMTCS'03*, Lecture Notes Comput. Sci. 2731, Springer-Verlag, Heidelberg, 2003, 307 pp.
14. C. S. Calude, M. J. Dinneen, F. Peper (eds.). *Unconventional Models of Computation (UMC'02)*, Lecture Notes Comput. Sci. 2509, Springer-Verlag, Heidelberg, 2002, 338 pp.
15. C. S. Calude, Gh. Păun, G. Rozenberg, A. Salomaa (eds.). *Multiset Processing. Mathematical, Computer Science, and Molecular Computing Points of View*, Lecture Notes Comput. Sci. 2235, Springer-Verlag, Heidelberg, 2001, 358 pp.
16. C. S. Calude, M. J. Dinneen, S. Sburlan (eds.). *Combinatorics, Computability and Logic, Proceedings of DMTCS'01*, Springer-Verlag, London, 2001, 250 pp.
17. I. Antoniou, C. S. Calude, M. J. Dinneen (eds.). *Unconventional Models of Computation (UMC'2K)*, Springer-Verlag, London, 2000, 310 pp.
18. C. S. Calude, G. Păun (eds.). *Finite Versus Infinite. Contributions to an Eternal Dilemma*, Springer-Verlag, London, 2000, x+371 pp.<sup>2</sup>
19. C. S. Calude, M. J. Dinneen (eds.). *Combinatorics, Computation, Logic, Proceedings of DMTCS'99-CATS'99*, Springer-Verlag, Singapore, 1999, 368 pp.
20. C. S. Calude (ed.). *People and Ideas in Theoretical Computer Science*, Springer-Verlag, Singapore, 1998, 341 pp. (MR 2001b:68032)
21. C. S. Calude, J. Casti, M. Dinneen (eds.). *Unconventional Models of Computation*, Springer-Verlag, Singapore, 1998, 416 pp.
22. D. S. Bridges, C. S. Calude, J. Gibbons, S. Reeves, I. Witten (eds.). *Combinatorics, Complexity, Logic, Proceedings of DMTCS'96*, Springer-Verlag, Singapore, 1996, 422 pp.
23. C. Calude, M. J. J. Lennon, H. Maurer (eds.). *Salodays in Auckland, Proceedings*, Auckland University, Auckland, 1994, 115 pp.
24. C. Calude (ed.). *How to Cope with Complexity*, Ed. Academiei, Bucharest, 1993, 232 pp. (in Romanian)
25. A. Atanasiu, C. Calude (eds.). *Salodays in Theoretical Computer Science*, Hyperion XXI Press, Bucharest, 1993, 150 pp.
26. C. Calude, D. Chițoran, M. Malița (eds.). *New Information Technologies in Higher Education. Studies on the Introduction of New Information Technologies in Higher Education in the European Region*, CEPES-UNESCO, Bucharest, 1989, 339 pp.

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<sup>2</sup>Listed by "Reference and Book List", *Notices Amer. Math. Soc.* 48, 5 (2001), 518.

27. C. Calude, I. Tomescu (eds.). *Scientific Papers Published by the Mathematics Faculty Staff*, Bucharest University, 1988, 474 pp. (in Romanian)
28. C. Calude, C. Năstăsescu (eds.). *Scientific Papers Published by the Mathematics Faculty Staff*, Bucharest University, 1984, 418 pp. (in Romanian)

## 6 Edited Special Issues of Journals

1. C. S. Calude, J. F. Costa, H. Guerra (eds.). Special issue: *Physics and Computation 2010*, *Appl. Math. Comput.* (2011), to appear.
2. C. S. Calude, J. F. Costa (eds.). Special issue: *Physics and Computation 2010*, *International Journal Unconventional Computing* (2011), to appear.
3. C. S. Calude, J. F. Costa (eds.). Special issue: *Unconventional Computation 2008*, *Selected papers, Natural Computing*, Springer, 4 (2010).
4. C. S. Calude, J. F. Costa (eds.). Special issue: *Physics and Computation*, *Appl. Math. Comput.*, 215, 4 (2009), 122 pp.
5. C. S. Calude, J. F. Costa (eds.). Special issue: *Physics and Computation 2008*, *Natural Computing*, 8, 3 (2009), Springer, 212 pp.
6. C. S. Calude, H. Jürgensen (eds.). Special issue: *Algorithmic Complexity and Applications*, *Fundamenta Informaticae*, 83, 1–2 (2008), 232 pp.
7. C. S. Calude, G. Păun (eds.). Special issue: *Unconventional Computation 2006*, *Selected papers, Natural Computing*, 7,1 (2008), 109 pp.
8. C. Calude, H. Maurer, A. Salomaa, K. Tochtermann (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 12–2006, Springer, Berlin, 2007, 1799 pp.
9. C. S. Calude, G. Ștefănescu, M. Zimand (eds.). Special issue: *Combinatorics and Related Areas*, *J. UCS* 13, 11 (2007), 402 pp.
10. M. Burgin, C. S. Calude (eds.). Special issue: *Complexity of Computation and Algorithms*, *Theoret. Comput. Sci.*, 383/2–3 (2007), 111–290.
11. C. S. Calude, R. Lupacchini, G. Sandri (eds.). Special issue: *Natural Processes and Models of Computation*, *Natural Computing*, 2 (2007), 73–205.
12. C. Calude, H. Maurer, A. Salomaa, K. Tochtermann (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 11–2005, Springer-Verlag, Berlin, 2006, 2191 pp.
13. C. S. Calude, H. Ishihara (eds.). Special issue: *Constructivity, Computability, and Logic*, *J. UCS* 11, 12 (2005), Springer, 1863–2191.
14. C. Calude, H. Maurer, A. Salomaa, K. Tochtermann (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 10–2004, Springer-Verlag, Berlin, 2005, 1730 pp.
15. C. S. Calude (ed.). Special issue: 8th International Conference on Developments in Language Theory (DLT '04), *International Journal of Foundations of Computer Science*, 16, 4 (2005), 623–802.
16. C. S. Calude, G. Păun, G. Rozenberg (eds.). Special Issue on Contagious Creativity: In Honor of the 80th Birthday of Professor Solomon Marcus, *Fundamenta Informaticae* 64, 1–4 (2005), 482 pp.
17. C. Calude, H. Maurer, A. Salomaa, K. Tochtermann (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 9–2003, Springer-Verlag, Berlin, 2004, 1535 pp.
18. C. Calude, H. Maurer, A. Salomaa, K. Tochtermann (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 8–2002, Springer-Verlag, Berlin, 2003, 1066 pp.

19. C. S. Calude, Gh. Păun (eds.). Special issue of the *Romanian Journal of Information Science and Technology* 5, 1–2 (2002), 191 pp.
20. C. S. Calude, K. Salomaa, S. Yu (eds.). *Advances and Trends in Automata and Formal Languages. A Collection of Papers in Honour of the 60th Birthday of Helmut Jürgensen*, *J. UCS* 8, 3 (2002), 250 pp.
21. C. S. Calude, K. Svozil (eds.). Special issue on “Real and Virtual”, *Millennium III* 6–7 (2001), 146 pp.
22. C. Calude, H. Maurer, A. Salomaa (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 7–2001, Springer-Verlag, Berlin, 2001, 1138 pp.
23. C. S. Calude, G. Ștefănescu (eds.). *Automata, Logic, and Computability. Special issue dedicated to Professor Sergiu Rudeanu Festschrift*. *J. UCS* 6, 1 (2000), 225 pp.
24. C. Calude, H. Maurer, A. Salomaa (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 6–2000, Springer-Verlag, Berlin, 2000, 1254 pp.
25. C. Calude, H. Maurer, A. Salomaa (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 5–1999, Springer-Verlag, Berlin, 1999, 856 pp.
26. C. Calude, H. Maurer, A. Salomaa (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 4–1998, Springer-Verlag, Berlin, 1998, 900 pp.
27. C. Calude, H. Maurer, A. Salomaa (eds.), *J. UCS: The Journal of Universal Computer Science*, Vol. 3–1997, Springer-Verlag, Berlin, 1998, 1417 pp.
28. C. S. Calude, J. L. Casti (eds.). *Unconventional Models of Computation, Complexity*, Vol. 4, 1, (1998), 13–42. (special issue)
29. C. Calude, H. Maurer, A. Salomaa (eds.), *J. UCS: The Journal of Universal Computer Science*, Vol. 2–1996, Springer-Verlag, Berlin, 1998, 860 pp.
30. D. S. Bridges, C. S. Calude, M. Dinneen, B. Khossainov (eds.). *Proceedings of the First Japan–NZ Workshop on “Logic in Computer Science”*, *J. UCS* 3 (1997), 1134–1281. (special issue)
31. C. Calude, H. Maurer, A. Salomaa (eds.). *J. UCS: The Journal of Universal Computer Science*, Vol. 1–1995, Springer-Verlag, Berlin, 1996, 832 pp.
32. C. Calude (ed.) *The Finite, the Unbounded and the Infinite, Proceedings of the Summer School “Chaitin Complexity and Applications”*, Mangalia, Romania, 27 June – 6 July, 1995, *J. UCS* 2 (1996), 242–441. (special issue)

## 7 Miscellanea Selected

### 7.1 Research Reports

1. A. A. Abbott, M. Bechmann, C. S. Calude, A. Sebald. A Nuclear Magnetic Resonance Implementation of a Classical Deutsch-Jozsa Algorithm, *CDMTCS Research Report*, 405, 2011, 19 pp.
2. C. S. Calude, M. J. Dinneen, A. M. Gardner. Opening the Book of Randomness (Extended Version), *CDMTCS Research Report* 393, 2010, 19 pp.
3. A. A. Abbott, C. S. Calude. Von Neumann Normalisation of a Quantum Random Number Generator, *CDMTCS Research Report* 392, 2010, 26 pp.
4. C. S. Calude, M. Dinneen, M. Dumitrescu, K. Svozil. How Random Is Quantum Randomness? (Extended Version), *CDMTCS Research Report* 372, 2009, 70 pp.

5. C. S. Calude, K. Svozil. Is Feasibility in Physics Limited by Fantasy Alone?, [arXiv:0910.0457v1](https://arxiv.org/abs/0910.0457v1) [physics.hist-ph] 2 October 2009, 9pp.
6. Cristian S. Calude, José F. Costa (editors). Pre-proceedings of the Workshop Physics and Computation *CDMTCS Research Report 327*, 2008, 353 pp.
7. Cristian S. Calude. Incompleteness: A Personal Perspective, *CDMTCS Research Report 324*, 2008, 14 pp.
8. Cristian S. Calude and Brian E. Carpenter. A Dialogue on the *Internet*, *CDMTCS Research Report 320*, 2008, 12 pp.
9. C. S. Calude, J. Gruska. Quantum Informatics and the Relations Between Informatics, Physics and Mathematics: A Dialogue, *CDMTCS Research Report 306*, 2007, 31 pp.
10. C. S. Calude, M. J. Dinneen, V. Vajnoski (eds.). *Supplemental Papers for DMTCS'03*, *CDMTCS Research Report*, 215, 2003, 41 pp. *CDMTCS Research Report 150*, 2001, 12 pp.
11. I. Antoniou, C. S. Calude, M. J. Dinneen (eds.). Supplemental Papers for the 2nd Unconventional Models of Computation Conference, UMC2K, *CDMTCS Research Report 147*, 2000, 72 pp.
12. C. S. Calude, M. J. Dinneen, G. Păun (eds.). Pre-Proceedings of the Workshop on Multiset Processing, *CDMTCS Research Report 140*, 2000, 317 pp.
13. C. S. Calude, M. J. Dinneen (eds.). The 5th Anniversary Workshop on Discrete Mathematics and Theoretical Computer Science, *CDMTCS Research Report 134*, 2000, 12 pp.
14. C. S. Calude, W. Merkle, Y. Wang. A Note on Pseudorandom Generators, *CDMTCS Research Report 086*, 1998, 8 pp.
15. C. S. Calude, L. Priese, L. Staiger. Disjunctive Sequences: An Overview, *CDMTCS Research Report 063*, 1997, 40 pp.
16. C. S. Calude. A Genius' story: Two books on Gödel, *CDMTCS Research Report 039*, 1997, 8 pp.
17. C. Calude, S. Marcus, Gh. Păun. Algorithmic Procedures and Operational Characterizations for Need Sets, in *Mathematical Paths in the Study of Human Needs*, HSDRGPID-46/UNUP-160, United Nations University, Tokyo, 1980, 4-31. Reprinted in S. Marcus. *Words and Languages Everywhere*, Polimetrica, Milano, 2007, 469–488.
18. C. Calude, S. Marcus, Gh. Păun. Empirical Information and Theoretical Constructs in the Study of Needs II. Effective Use of Need Sets; Applications to Medical Needs, *RS - Bucharest University*, 1979, 34 pp.

## 7.2 Refereed Abstracts

1. C. S. Calude. Algorithmic randomness, quantum physics, and incompleteness, *Pre-Proceedings of the International Conference on Machine, Computation and Universality (MCU'2004)*, Euler International Mathematical Institute, Russia, S. Petersburg, September 2004, p. 50.
2. C. S. Calude, E. Calude. *QED vs QD*, in C. S. Calude, M. J. Dinneen, S. Sburlan (eds.). Supplemental Papers for DMTCS'01, *CDMTCS Research Report 152*, 2001, p. 5.
3. C. S. Calude. Real numbers: from computable to random, in *Second Pacific Rim Conference on Mathematics*, 4–8 January 2001, Taipei, Taiwan, II–5.
4. C. S. Calude. Computable enumerable reals, in D. Bainov (ed.). *Abstracts of the Eighth International Colloquium on Numerical Analysis and Computer Science with Applications*, Plovdiv, Bulgaria, August 1999, 30.
5. C. S. Calude, E. Calude, C. Ștefănescu. Computational complementarity for Mealy automata, Extended abstract, *An. Univ. București, Mat.-Inf.* 47 (1998), 35–39.

6. C. Calude, E. Calude, B. Khossainov, Marjo Lipponen. From complete to incomplete automata: simulation, universality and minimality, *Philfest'97, Australasian Association for Logic 1997 Annual Conference*, Auckland, July 1997, *Bull. Symbolic Logic*, 4, 4 (1998), 460.
7. C. Calude. Gödel's incompleteness theorem—an information-theoretic perspective, *Bull. Symbolic Logic* 1 (1995), 352.
8. C. Calude. What is a random string?, in *The Foundational Debate. Complexity and Constructivity in Mathematics and Physics—Abstracts*, Institut Wiener Kreis, Wien, 1994, 1.
9. C. Calude, H. Jürgensen. Randomness as an invariant for number representations, in W. Gasarch (ed.) *1994 Structures In Complexity Conference—Research Abstracts*, Vol. IV, 14.
10. C. Calude. Information and randomness—an overview, in K. Ambos-Spies, S. Homer, U. Schöning (eds.), *Structure and Complexity*, Dagstuhl Seminar Report 82 (9407), February, 1994, 8.
11. C. Calude. Recursive Baire Classification, Speedable Functions and Independent Statements, *Mathematisches Forschungsinstitut Oberwolfach*, Tagungsbericht 55/1990, *Mathematisches Logik*, 1990, 2.
12. C. Calude, E. Kurtz. On Kraft–Chaitin inequality, *Abstracts of Logic Colloquium'89*, Berlin, 1989; also in *J. Symbolic Logic* 75 (1992), 289.
13. C. Calude, I. Chişescu. Random sequences: some topological and measure-theoretical properties, *Constructive Newsletter* 1 (1988), 8.
14. C. Calude, Gh. Păun. Independent instances for some undecidable problems, *J. Symbolic Logic* 49 (1984), 686.

### 7.3 Varia

1. “Resolved: God Exists.” Review of R. Goldstein. *36 Arguments for the Existence of God: A Work of Fiction*, Pantheon Books, NY, 2010, [http://www.amazon.co.uk/gp/cdp/member-reviews/A3A7QOZ8WMS6LW/ref=cm\\_cr\\_dp\\_auth\\_rev?ie=UTF8&sort\\_by=MostRecentReview](http://www.amazon.co.uk/gp/cdp/member-reviews/A3A7QOZ8WMS6LW/ref=cm_cr_dp_auth_rev?ie=UTF8&sort_by=MostRecentReview), 5 May 2010.
2. C. S. Calude. Thinking about Professor Marcus, in L. Spandonide (ed.). *Education Show Protagonist: Solomon Marcus*, Spandugino Publishing House, Bucharest, 2010, 49–51. (in Romanian)
3. C. S. Calude. The unprovable propositions of Freeman Dyson, *Revista de Logică*, January 2009, <http://egovbus.net/rd1/articole/No1Art27.pdf>. (in Romanian)
4. C. S. Calude. My roots: from Moisil to Marcus, in A. Iorgulescu, S. Marcus, S. Rudeanu, D. Vaida (eds.). *Grigore C. Moisil and His Followers in the Field of Theoretical Computer Science*, Ed. Academiei, Bucharest, 2007, 362–365.
5. C. Calude. Review essay of ‘Jan Kåhre. The Mathematical Theory of Information, Kluwer, Boston, 2002’, *The Mathematical Intelligencer*, 29, 1 (2007), 64–65.
6. C. Calude. Probabilities for understanding the halting problem, *La Recherche* (Mathématiques), No 395, March (2006), p. 29. (In French)
7. C. S. Calude. Great! Review of R. Goldstein. *Incompleteness. The Proof and Paradox of Kurt Gödel*, Atlas Books, New York, 2005, [www.amazon.com/gp/cdp/member-reviews/A3A7QOZ8WMS6LW/ref=cm\\_cr\\_auth/103-5969736-5323808?%5Fencoding=UTF8](http://www.amazon.com/gp/cdp/member-reviews/A3A7QOZ8WMS6LW/ref=cm_cr_auth/103-5969736-5323808?%5Fencoding=UTF8), May 2005.
8. C. S. Calude. Computing Beyond Algorithmics, Position paper at Workshop *The Grand Challenge in Non-Classical Computation*, York, April 2005, [www.cs.york.ac.uk/nature/workshop/papers/Calude.pdf](http://www.cs.york.ac.uk/nature/workshop/papers/Calude.pdf).

9. C. S. Calude. The theorem as an emotion, *Contemporanul* 5, 614 (2003), p. 32. (in Romanian)  
Reprinted in in A. Iorgulescu, S. Marcus, S. Rudeanu, D. Vaida (eds.). *Grigore C. Moisil and His Followers in the Field of Theoretical Computer Science*, Ed. Academiei, Bucharest, 2007, 266–267.
10. C. S. Calude. Quantum Computing: From Classical to Unconventional, *Complexity Roadmap*, European Commission, (IST-2001-32802) [www.complexityscience.org/NoE/Qchtml%20Folder/qc.htm#qc\\_b](http://www.complexityscience.org/NoE/Qchtml%20Folder/qc.htm#qc_b).
11. C. S. Calude. Reality vs. virtual reality, in C. S. Calude, K. Svozil (eds.). Special issue on “Real and Virtual” *Millennium III* 6–7 (2001), 123–128.
12. C. Calude. Is randomness simple? *The Mathematics Student Journal*, The Foundation “Liceul Vasile Alecsandri”, Galați, 16 (2000), 6–7.
13. C. S. Calude, Communication for a mobile millennium, *Millennium III*, 4 Winter (1999–2000), 9–18.
14. C. S. Calude. Gabriel Sudan centenary, *Academica*, 9, 9–10 (1999), 44. (in Romanian)
15. C. S. Calude, M. J. Dinneen. Breaking the Turing barrier, *NZ Science Monthly* 10, 5 (1999), 9–10.
16. C. S. Calude. Sonic boom, *London Review of Books*, 4 February, (1999), 4. See [www.lrb.co.uk/v21/n03/lett2103.htm](http://www.lrb.co.uk/v21/n03/lett2103.htm).
17. C. S. Calude. Informatics in a quantum variant, *Academica* 6, 90 (1998), 31–32. (in Romanian)
18. C. Calude. A virtual letter to Gr. C. Moisil, *Academica* 5 (65) (1996), 3. (in Romanian)
19. C. Calude, M. Jalobeanu. The Journal of Universal Computer Science, *PC Report*, 34 (1995), 14–15. (in Romanian)
20. C. Calude, H. Maurer, A. Salomaa. The Journal of Universal Computer Science, *J. UCS*, Vol. 0 (1994), 109–115.
21. C. Calude, R. W. Doran. Does God play dice? *Bull. Eur. Assoc. Theor. Comput. Sci.* 50(1993), 338–341.
22. C. Calude. Mathematics at the end of the century, *Academica* 1, 14 (1991), 27. (in Romanian)
23. C. Calude. A mathematical issue related to the idea of democracy, *Magazine* 22 47 (7 December) (1990), 6. (in Romanian)
24. C. Calude. Dilemmas of artificial intelligence, *Contemporanul* 18 (17 August) (1990), 2. (in Romanian)
25. C. Calude. The future of informatics, *Contemporanul* 17 (11 August) (1990), 12. (in Romanian)
26. C. Calude, E. Calude. Traps of the infinity in elementary mathematics, *Gazeta Matematică* XCII (1988), 63–64. (in Romanian)
27. C. Calude. Mathematics and computers, *Gazeta Matematică (PMMMI)* 1 (1986), 14. (in Romanian)
28. C. Calude. Gödel’s theorem, a limit of formalization?, *The Book of Interferences*, Ed. științifică și enciclopedică, Bucharest, 1985, 63–68. (in Romanian)
29. C. Calude, I. Chițescu, Gh. Păun, D. Vaida. Professor Solomon Marcus at the 60th birthday anniversary, *Gazeta Matematică (PMMMI)* 3–4 (1985), 179–181. (in Romanian)
30. C. Calude. A student of Professor Moisil, *Gazeta Matematică Seria A*, LXIX (1974), 179–180. (in Romanian)