

List of publications

Mathematics

Original papers:

1. *On the mixed boundary value problem of the theory of analytic functions* (Czech), Časopis Pěst. Mat. 91 (1966), 320-336. (MR 34 #6113)
2. *Connection of a cyclic and radial variation of a path with its length and bend* (Czech) (with J. Štulc), Časopis Pěst. Mat. 93 (1968), 80-116. (MR 39 #384)
3. *Angular limits of double-layer potentials* (Czech), Časopis Pěst. Mat. 95 (1970), 379-401. (MR 52 3558)
4. *On the heat potential of the double distribution*, Časopis Pěst. Mat. 98 (1973), 181-198. (MR 48 2410)
5. *Some remarks on Dirichlet problem*, in: Nonlinear Evolution Equations and Potential Theory (ed.J.Král), Academia, Praha 1975, 125-132. (MR 58 1192)
6. *On a Generalized Heat Potential*, Czechoslovak Math. J. 25 (1975), 404-423. (MR 52 11086)
7. *An inequality for finite sums in \mathbb{R}^m* (with I.Netuka), Časopis Pěst. Mat. 103 (1978), 73-77. (MR 58 1062)
8. *Harmonic continuation and removable singularities in the axiomatic potential theory* (with I.Netuka), Math. Ann. 234 (1978), 117-123. (MR 58 1210)
9. *Regions of harmonicity* (with I.Netuka), Amer. Math. Monthly 87 (1980), 203-205. (MR 81f: 31008)
10. *Sequence Solutions of the Dirichlet Problem*, Časopis Pěst. Mat. 106 (1981), 84-93. (MR 83h: 31012)
11. *On harmonic functions (solution of the problem 6393 [1982, 502] proposed by G. A. Edgar)* (with I.Netuka), Amer. Math. Monthly 91 (1984), 61-62.
12. *Mean Value Property and Harmonic Functions* (with I.Netuka), in: Classical and Modern Potential Theory and Applications NATO ASI Series, Kluwer Academic Publishers), Dordrecht 1994, 359-398. (MR 96c: 31001)
13. *Martin Compactification for Discrete Potential Theory and the Mean Value Property* (with A.Cornea), Potential Analysis 4 (1995), 547-569. (MR 96k: 31005)
14. *Choquet's theory and the Dirichlet problem* (with J.Lukeš and I.Netuka), Expositiones Math. 20 (2002), 229-254 and also (Czech): Pokroky Mat. Fyz. Astronom. 45 (2000), 98-124. (MR 2003i: 31001)

Survey papers, Conference contributions:

1. *The Dirichlet problem and the Keldyš theorem* (Czech) (with I.Netuka), Pokroky Mat. Fyz. Astronom. 24 (1979), 77-88. (MR 82f: 01126)

2. *Integral equations in potential theory* (Czech) (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 28 (1983), 22-38. (MR 85b: 31001)
3. *Some Aspects of Modern Potential Theory*, in: *Recent Trends in Mathematics*, Teubner-Texte zur Math. B 50, Teubner, Leipzig 1983, 284-293.
4. *Summation of Divergent Series* (Czech) in: *Světónázorová výchova v matematice*, Jednota čs. matematiků a fyziků, Praha 1987, 169-186.
5. *Recent results on number Pi* (Czech), *Pokroky Mat. Fyz. Astronom.* 43 (1998), 217-236.
6. *On summability of series* (I, II) (Czech), *Učitel matematiky* 7 (1999), č.3, 137-145, a č. 4, 201-206.
7. *Generating functions* (Czech) (with P. Trojovský), *Pokroky Mat. Fyz. Astronom.* 45 (2000), 7-35.
8. *Remarks on Gamma function* (Czech), in: *Jubilee kateder matematiky TUL 2000* (edit. J. Vild), Technická univerzita Liberec, Liberec 2000, 91-96.
9. *Centenary of the Baire category theorem* (Czech) (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 45 (2000), 232-256.
10. *Choquet's theory of capacities* (Czech) (with J. Lukeš and I. Netuka), *Pokroky Mat. Fyz. Astronom.* 47 (2002), 265-279.

Proceedings:

1. *Potential Theory: Surveys and Problems* (Editor with J. Král, J. Lukeš and I. Netuka), *Lecture Notes in Mathematics* 1344, Springer-Verlag, Berlin, 1988.
2. *Proceeding of the Conference on Potential Theory, Praha, 1987*, (Editor with J. Král, J. Lukeš and I. Netuka), Plenum Press, New York, 1988.
3. *Remarks on the course of Mathematical Analysis*, (Czech), *Celostátní seminář kateder matematiky fakult připravujících učitele matematiky 6.-8.9.1993*, UJEP, Ústí/L. 1993, 5-27.
4. *Is there a king's road to exponential and logarithmic function?*, (Czech), 5. setkání matematiků všech typů a stupňů škol, Mariánské Lázně 2.-4.11.1995, *Jednota čs. matematiků a fyziků*, Plzeň 1995, 13-17 and *Učitel matematiky* 4 (1996), č. 2, 65-80, č. 3, 129-145.
5. *Potential Theory – ICPT 94, Proceedings of the International Conference on Potential Theory held in Kouty, August 13-20, 1994* (Editor with J. Král, J. Lukeš and I. Netuka), W. de Gruyter, Berlin, 1996.

Textbooks (all in Czech):

1. *Surveys and practice in mathematical analysis* (coauthor) [*Referáty a praktika z matematické analýzy*], Univerzita Karlova, SPN, Praha, 1970.
2. *Problems in mathematical analysis* [*Problémy z matematické analýzy*], SPN, Praha 1972, (Revised version of 1).

3. *Problems in functional analysis [Příklady z funkcionální analýzy]*, MFF UK, Praha 1972, (with I. Netuka).
4. *Potential theory II, SPN, Praha 1972 [Teorie potenciálu II]*, (with J. Král and I. Netuka).
5. *Potential theory III, SPN, Praha 1976 [Teorie potenciálu III]*, (with J. Král and I. Netuka).
6. *Potential theory IV, SPN, Praha 1977 [Teorie potenciálu IV]*, (with J. Král and I. Netuka).
7. *Problems in mathematical analysis III [Příklady z matematické analýzy III]*, Univerzita Karlova, Praha 1972; reissue: SPN, Praha 1977, (with I. Netuka).
8. *Problems in mathematical analysis. Measure and integration [Problémy z matematické analýzy. Míra a integrál]*, MFF UK, Praha 1982, (with I. Netuka).
9. *Philosophical problems of mathematics III [Filozofické problémy matematiky III]*, SPN, Praha 1985, (coauthor).
10. *Mathematical analysis for prospective teachers I, II [Matematická analýza pro učitele I, II]*, Matfyzpress, Praha 1997; 2nd revised edition Matfyzpress, Praha 2001.
11. *Complex analysis for prospective teachers [Komplexní analýza pro učitele]*, Univerzita Karlova v Praze, Karolinum, Praha 2000.
12. *Foundations of Mathematical Analysis I [Základy matematické analýzy I]*, Matfyzpress, Praha 2004, (Revised and enlarged version of 10, První díl).
13. *Foundations of Mathematical Analysis II [Základy matematické analýzy II]*, Matfyzpress, Praha 2009, (Revised and enlarged version of 10, Druhý díl).
14. *Ordinary (linear) differential equations and their systems [Obyčejné (lineární) diferenciální rovnice a jejich systémy]*, Technická univerzita v Liberci, Liberec 2012, (with M. Brzezina).
15. *Introduction to complex analysis [Úvod do komplexní analýzy]*, Technická univerzita v Liberci, Liberec 2012, (with M. Brzezina).
16. *Fourier series [Fourierovy řady]*, Technická univerzita v Liberci, Liberec 2013, (with M. Brzezina).
17. *Some important numbers [Některá důležitá čísla]*, Technická univerzita v Liberci, Liberec 2013, (with M. Brzezina).

History of Mathematics

Biography and history of mathematics papers:

1. *Henri Lebesgue (on the occasion of 100th anniversary of birth)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 20 (1975), 301-307. (MR 58 10199)
2. *Bernhard Riemann (on the occasion of 150th anniversary of birth)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 21 (1976), 143-149. (MR 58 10200)
3. *Ivar Fredholm and the origins of functional analysis* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 22 (1977), 10-21. (MR 58 27081)

4. *Gosta Mittag-Leffler (on the fiftieth anniversary of his death)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 22 (1977), 241-245. (MR 58 4947)
5. *F. Riesz and the mathematics of the twentieth century* (Czech), (with I. Netuka), Pokroky Mat. Fyz. Astronom. 25 (1980), 128-138. (MR 83g: 01077)
6. *Bolzano's function* (Czech), Rozhledy mat. fyz. 60 (1981), 251-254.
7. *Eduard Helly, convexity and functional analysis* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 29 (1984), 301-312. (MR 86e: 01025)
8. *Union of Czechoslovak Mathematicians and Physicist* (with L.Pátý), Jednota čs. matematiků a fyziků, Praha 1984.
9. *Recollection of Professor Marcel Brelot* (Czech) (with J. Král, J. Lukeš and I. Netuka), Pokroky Mat. Fyz. Astronom. 33 (1988), 170-173. (MR 89h:01071)
10. *The centenary of the birth of Josef Holubář* (Czech), Math. Bohem. 120 (1995), 219–220.
11. *Remarks on the history of function gamma* (Czech), in: Člověk – umění – matematika (edit. Bečvář, J., Fuchs, E.), Prometheus, Praha 1996, 49-71. (MR 1915570)
12. *On some important series* (Czech), in: Man – Art – mathematics, Dej. Math./Hist. Math. 4, Prometheus, Prague, 1996, 137-154 (MR 1915574)
13. *Seminar on mathematical analysis 1967–1996* (Editor with M. Dont, J. Lukeš and I. Netuka), Faculty of Mathematics and Physics, Charles University, Praha 1996.
14. *On a small experiment with the name Pexider* (Czech), in: Dějiny matematiky, Sv. 5, Ed. J. Bečvář, MVS JČMF, Praha, 1997, 61-64.
15. *Pedagogical activities of Vojtěch Jarník*, in: Life and work of Vojtěch Jarník (edit. Novák, B.), Society of Czech Mathematicians and Physicists, Prometheus, Praha 1999, 83-94.
16. *Seminar on mathematical analysis 1967–2001* (Editor with M. Dont, J. Lukeš and I. Netuka), Faculty of Mathematics and Physics, Charles University, Praha 2001.
17. *Weierstrass approximation theorem* (Czech), Pokroky Mat. Fyz. Astronom. 47 (2002), 181-190.
18. *A remembrance of Professor Heinz Bauer* (Czech) (with M. Brzezina and J. Lukeš), Pokroky Mat. Fyz. Astronom. 48 (2003), 171-172.
19. *Weierstrass' theorem before Weierstrass*, in: HAT (2003), <http://www.math.technion.ac.il/hat/articles.html>.
20. *Memories on Professor Aurel Cornea* (Czech) (with J. Lukeš and I. Netuka), Pokroky Mat. Fyz. Astronom. 50 (2005), 343-344.
21. *In memory of Josef Král* (with J. Lukeš and I. Netuka) Czech. Math. Journal 56 (131) (2006), 1063-1083 (MR 2280795).
22. *In memory of Josef Král* (with J. Lukeš and I. Netuka), Math. Bohem. 131 (MR 2273933). (2006), 427-448.

23. *A Fourierian anniversary* (Czech), Pokroky Mat. Fyz. Astronom. 52 (2007), 282-295.
24. *Life and work of Aurel Cornea (July 6, 1933–September 3, 2005)*, Potential Theory and Stochastics in Albac, XVII-XXVI (Theta 2009) (MR 2681832)
25. *An experiment with the name Pexider*, in: Jan Vilém Pexider (1874-1914), Matfyzpress, Prague 2009.
26. *Remarks on the history of functional equations* (Czech), in: Proceedings of the 31. conference of the History of Mathematics, Eds. J. Bečvář and M. Bečvářová, Matfyzpress, Praha 2010, 29-50.
27. *Euler from another viewpoint* (Czech), Pokroky Mat. Fyz. Astronom. 58 (2013), 301-310.
28. *A Mathematical Anniversary*, Acta Universitatis Carolinae – Mathematica et Physica 52 (2011), 3-6.
29. *One hundred years of the mathematics building in Prague* (Czech), Pokroky Mat. Fyz. Astronom. 57 (2012), 36-49.
30. *The Moscow Mathematical Society, Egorov and Luzin* (Czech), Pokroky Mat. Fyz. Astronom. 59 (2014), 319-334.
31. *A memory on mathematician Felix Hausdorff* (Czech), Maskil 15 (2015/16), 20.
32. *Mathematics and Second World War* (Czech), Pokroky Mat. Fyz. Astronom. 61 (2016), 21-38.
33. *A Survey in l'Enseignement Mathématique and Matyáš Lerch* (Czech) (with L. Balková), Pokroky Mat. Fyz. Astronom. 61 (2016), 285-294.
34. *Plimpton 322 — A Breakthrough Discovery?* (Czech) (with M. Bečvářová), Pokroky Mat. Fyz. Astronom. 62 (2017), 254-263.

Education and teaching problems:

1. *On entrance exams for study at MFF* (Czech), Matematika ve škole 18 (1987/88) (8), 459-462.
2. *Remarks on Mathematical Analysis as Part of Studies of Intending Teachers* (Czech), in: Proceedings of the Conference on Didactical Problems in the University Education of Mathematics Teachers, Charles University, Praha 1987, 231-236.
3. *Mathematical Analysis: When, Why and What* (Czech), in: Proceedings of the Second Conference on Didactical Problems in the University Education of Mathematics Teachers, Charles University, Praha 1989, 127-133.
4. *Mathematical Texts and Personal Computers* (Czech) (with J. Vosmanský and O. Ulrych), Pokroky Mat. Fyz. Astronom. 35 (1990), 1-12.
5. *On the theorem of Fermat* (Czech), Rozhledy matematicko-fyzikální 69 (1990/91), 323-325.
6. *Study of mathematics on German Universities* (Czech) (with J. Daneš and I. Netuka), Pokroky Mat. Fyz. Astronom. 36 (1991), 296-301.
7. *Concept of education in Czech Republic* (Czech) (coauthor), Učitel'ské noviny 94 (1991), č. 29 and in a Supplement to Matematika-Fyzika-Informatika 1, leden – únor 1992.

8. *Rudin's textbooks on Mathematical Analysis* (Czech) (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 40 (1995), 11-17.
9. *Notes on Thesis in Didactics of Mathematics* (Czech), in: *Didactics, history, fundamentals of Mathematics*, Proceedings of the seminar on PhD studies in the Czech Republic, Kostelec/Č.l., 22.-24.6.1995, MPS JČMF, 1996, 18-21.
10. *Teaching activities of Jan Mařík*, *Mathematica Bohemica* (Časopis Pěst. Mat.) 121 (1996), 337-347. (MR 97m: 01088)
11. *Pi or 3.14159 ...* (I,II) (Czech), *Učitel matematiky* 3 (1996), č. 3, 1-10, č. 4, 1-13.
12. *Golden section and some related things I, II* (Czech), *Učitel matematiky* 6 (1998), č. 3, 153-158, a 7 (1999), č. 1, 14-24.

Other articles:

1. *On the limits of the potential of the double distribution* [preliminary communication], *Comment. Math. Univ. Carolin.* 10 (1969), 189-194. (MR 40 #2896)
2. *Some properties of a generalized heat potential* [preliminary communication], *Comment. Math. Univ. Carolin.* 15 (1974), 357-360. (MR 58 7815)
3. *Dirichlet Problem in the Theory of Harmonic Kernels*, Thesis, Faculty of Mathematics and Physics, Charles University, Praha 1979, 1-111. [unpublished]
4. *Problems No. 3, 9 and 13*, Problem Section, in: *Potential Theory*, Copenhagen, 1979, (Proceedings), *Lecture Notes in Mathematics* 787, Springer-Verlag, Berlin, 1980, 316-319.
5. *A look round the competition ISTAM* (Czech) (with J. Lukeš), *Pokroky Mat. Fyz. Astronom.* 26 (1981), 292-293.
6. *Mathematical competition of undergraduates* (Czech) (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 26 (1981), 293-294.
7. *Mathematical competition of undergraduates MSV 81* (Czech) (editor with I. Netuka), MFF UK, Praha 1981.
8. *Restricted Mean Value Property in Axiomatic Potential Theory* [preliminary communication], *Comment. Math. Univ. Carolin.* 23 (1982), 613-628. (MR 84c: 31010)
9. *Mathematical competition of undergraduates MSV 82* (Czech) (editor with I. Netuka), MFF UK, Praha 1982.
10. *Second year of the Mathematical competition of undergraduates* (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 28 (1983), 48-49.
11. *International mathematical competition ISTAM* (Czech) (with I. Netuka), *Pokroky Mat. Fyz. Astronom.* 29 (1984), 46-47.
12. *Mathematical competition of undergraduates MSV 85* (Czech) (editor with I. Netuka), MFF UK, Praha 1985.

13. *Five years of the Mathematical competition of undergraduates* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 31 (1986), 234-237.
14. *The Banach-Tarski Paradox (o knize S. Wagona)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 32 (1987), 227-230. (MR 85i: 01024)
15. *International conference on potential theory (Praha)* (Czech) (with J. Král, J. Lukeš and I. Netuka), Pokroky Mat. Fyz. Astronom. 33 (1988), 108-110.
16. *TEX- a program for DTP* (Czech), Programy pro osobní počítače V., ČSVTS – FEL – ČVUT, Praha 1989, 142-147.
17. *Professor Ilja Černý (on the occasion of 60th anniversary of birth)* (Czech) (with I. Netuka), Časopis Pěst. Mat. 114 (1989), 311-315. (MR 90j: 01092)
18. *Professor Jan Mařík (on the occasion of 70th anniversary of birth)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 36 (1991), 125-126. (MR 1146849)
19. *Sixty Years of Josef Král (on the occasion of 60th anniversary of birth)* (with J. Lukeš and I. Netuka), Czechoslovak Math. J. 41 (1991), 751-765. (MR 92h: 01059)
20. *Sixty Years of Josef Král (on the occasion of 60th anniversary of birth)* (Czech) (with J. Lukeš and I. Netuka), Math. Bohemica (Časopis Pěst. Mat.) 116 (1991), 425-438. (MR 92m: 01068)
21. *TEX- DTP program for ambitious typographers?* (Czech) (with O. Ulrych), Typografia 94 (1991) (11), 406-407.
22. *International conference on potential theory (ICPT'90, Nagoya)* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 36 (1991), 186-188.
23. *A look round the Mathematical competition of undergraduates* (Czech) (with I. Netuka), Pokroky Mat. Fyz. Astronom. 36 (1991), 246.
24. *TEX in Czechoslovakia* (Czech), TUGboat 12 (March 1991), No. 1, 176-177.
25. *How to do it?* (Czech) T_EXbulletin 1 (1991) č. 3, 27-32.
26. *Who is the The Grand Wizard* (Czech), T_EXbulletin 2 (1992), č. 1, 27-28.
27. *Tables in PlainTEX* (Czech), T_EXbulletin 3 (1993), č.1, 10-23.
28. *On the awarding of an honorary doctorate from Karlovy University to Heinz Bauer* (Czech) (with I. Netuka and J. Lukeš), Pokroky Mat. Fyz. Astronom. 38 (1993), 95-101 (MR 1232377)
29. *Seventieth birthday of Prof. Ilja Černý?* (Czech) (with M. Brzezina) in: Jubilee kateder matematiky TUL 2000 (edit. Vild, J.), Technická univerzita Liberec, Liberec 2000, 6-7.
30. *Professor Gustave Choquet Doctor Universitatis Carolinae Honoris Causa Creatus* (Editor with J. Lukeš and I. Netuka), Matfyzpress, Praha 2002.
31. *Sixty years of Ivan Netuka* (with J. Král), Mathematica Bohemica 129 (2004), 91-107. (MR 2048789)
32. *Mathematical work of Nicu Boboc*, in: Fifty years of Modern potential theory in Bucharest, Institute of Mathematics of Simion Stoilov of Romanian Academy, Bucharest 2004, 3-21.

33. *Important jubilee of I. Netuka* (Czech) (with M. Brzezina and J. Lukeš), Pokroky Mat. Fyz. Astronom. 49 (2004), 76-78.
34. *Digitalisation project DML-CZ* (Czech) (with O. Ulrych), Pokroky Mat. Fyz. Astronom. 52 (2007), 260-261.
35. *DML-CZ – presence and future* (Czech) (with O. Ulrych), Pokroky Mat. Fyz. Astronom. 54 (2009), 224-231.
36. *Several remarks on the history of CSTUG* (Czech), Zpravodaj Československého sdružení uživatelů TeXu 19 (2009), 3-6
37. *Life and work of Nicu Boboc*, Rev. Roumaine Math. Pures Appl. 59 (2014), 3-16.
38. *Felix Hausdorff (1868-1942) (150th Birth Anniversary)* (Czech) (with L. Koudela), Pokroky Mat. Fyz. Astronom. 63 (2018), pp. 108-124.
39. *Otto Eduard Neugebauer (1899-1990)* (Czech), Pokroky Mat. Fyz. Astronom. 65 (2020), 19-35.

Translations:

1. W. Rudin: *Real and complex analysis* (with I. Netuka), Academia, Praha 1977 (MR 58 15765)
2. S. J. Taylor: *The regularity of randomness* (with I. Netuka), Pokroky Mat. Fyz. Astronom. 25 (1980), 28-34.
3. H. Bauer: *Approximation and abstract boundaries* (with I. Netuka), Pokroky Mat. Fyz. Astronom. 26 (1981), 305-326.
4. L. Zalcman: *Offbeat integral geometry* (with I. Netuka), Pokroky Mat. Fyz. Astronom. 27 (1982), 9-23. (MR 83f: 53052)
5. S. Wagon: *Circle-squaring in the twentieth century* (with I. Netuka), Pokroky Mat. Fyz. Astronom. 28 (1983), 320-328.
6. S. G. Krantz: *Mathematics versus Computer Science* (with O. Kowalski), Pokroky Mat. Fyz. Astronom. 31 (1986), 108-111.
7. M. Bridger: *Once more about mathematics and Computer Science* (with O. Kowalski), Pokroky Mat. Fyz. Astronom. 31 (1986), 275-276.
8. M. Doob: *A Gentle Introduction to T_EX* (with J. Daneš), Univerzita Karlova, Praha, 1990, and later revised for CSTUG.
9. W. Rudin: *Real and complex analysis* (with I. Netuka), 3. vydání, Academia, Praha 2003.