

Milan Pokorný: CV

General information

- born November 27, 1969 in Olomouc
- permanent residence Praha 13 (Stodůlky)
- married, 4 children

Studies and degrees

- secondary school: Gymnázium Přerov (1984–1988)
- master degree: Charles University, Prague, Faculty of Mathematics and Physics (1988–1993)
Mathematical and Computer Modeling
master degree thesis: **Cauchy problem for the viscous incompressible non-Newtonian fluid**, supervisor Prof. RNDr. Jindřich Nečas, DrSc.
title: Mgr.
- doctoral studies: Charles University, Prague, Faculty of Mathematics and Physics (1993–1999) & Université de Toulon et du Var, Toulon, France (1996–1999) ("thèse en cotutelle")
Mathematical and Computer Modeling & Applied Mathematics
doctoral thesis: **Asymptotic behaviour of solutions to certain partial differential equations describing the flow of fluids in unbounded domains**, supervisors Prof. RNDr. Jindřich Nečas, DrSc. and Prof. Dr. Antonín Novotný
titles: Ph.D. and "docteur"
- habilitation: Mathematics–Mathematical Analysis, Charles University, Prague, Faculty of Mathematics and Physics (2007)
habilitation thesis: **Matematická analýza parciálních diferenciálních rovnic popisujících proudění newtonovských tekutin**
degree: "docent"

- doctor of physical and mathematical sciences: Academy of Sciences of the Czech Republic (2020)
thesis: **Steady compressible Navier–Stokes–Fourier system and related problems: Large data results**
degree: DSc.
- full professor: Mathematics–Mathematical Analysis, Charles University, Prague, Faculty of Mathematics and Physics (2023)
degree: prof.

Professional Career

- 1993–2000 Palacký University, Olomouc, Faculty of Natural Sciences, Department of Mathematical Analysis and Applications of Mathematics (1993–1998 assistant, 1998–2000 assistant–professor)
- 2000–2001 University of Missouri, Columbia, MO, USA (postdoctoral fellow)
- 2000– Charles University, Faculty of Mathematics and Physics, Mathematical Institute of Charles University (2000–2007 assistant professor, 2008– associated professor); 2006– vice-director of the Mathematical Institute of Charles University; 2020– director of the Mathematical Institute of Charles University

Scientific achievements

- author or co-author of more than 70 original papers and one monograph with more than 1100 citations (without self-citations)
- 1999 2nd prize in the competition of young researchers (Czech Mathematical Scientific Section)
- 2016–2017 member of the Experts Panel, advisory board of the Council for Science and Research (evaluation of best papers in mathematics)
- 2018–2019 member of the Professional evaluators, advisory board of the Council for Science and Research

- 2018 8–10th place in the competition of high quality monographs of Charles University (monograph Feireisl, Eduard, Karper, Trygve G., Pokorný, Milan: **Mathematical theory of compressible viscous fluids. Analysis and numerics**)
- 2021 prize of the dean for the best publication in the Matfyzpress publishing house in the year 2020 within scientific publications (Černý, Robert, Pokorný, Milan: **Základy matematické analýzy pro studenty fyziky 1**)
- 2019–2021 member of the Panel 201 (Mathematics), Czech Science Foundation
- 2021– member of the Panel 202 (Mathematics and Informatics), Czech Science Foundation
- 2020– member of the Council of the Mathematical Institute of the Czech Academy of Sciences

Editorial boards

- editor of the Series of the books *Atlantis Briefs in Differential Equations* (with Š. Nečasová and Z. Došlá), 2013–2017
- member of the Editorial board of the *Nečas Center Series, Birkhäuser*, since 2018
- member of the Editorial board of *Applications of Mathematics*, since 2013
- member of the Editorial board of *Analysis*, since 2017
- member of the Editorial board of *Commentationes Mathematicae Universitatis Carolinae*, since 2019
- member of the Editorial board of *Mathematische Nachrichten*, since 2019
- guest Editor of *Journal of Mathematical Fluid Mechanics*, 2021–2022, volume dedicated to Antonín Novotný
- member of the Editorial board of *Applicable Analysis*, since 2023

Grants and projects

Czech Science Foundation

- 1996–1998 201/96/0228 ”Moderní matematické přístupy k mechanice kontinua”, member of the team
- 2000–2002 201/00/0768 ”Progresivní matematické přístupy k nelineární mechanice kontinua”, co-investigator (2000), member of the team (2000–2001)
- 2002–2004 201/02/P091 (post-doc grant) ”Kvalitativní vlastnosti řešení parciálních diferenciálních rovnic popisujících proudění tekutin”, principal investigator
- 2003–2005 201/03/0934 ”Nonlinear analysis in biomaterials”, member of the team
- 2005–2007 201/05/0164 ”Mathematical analysis in thermodynamics of fluids”, member of the team
- 2006–2008 201/06/0532 ”Incompressible fluids with complex rheology: mathematical analysis, computational simulations and optimization of their flows”, member of the team
- 2008–2010 201/08/0315 ”Mathematical analysis of complex systems in fluid dynamics”, member of the team
- 2009–2014 201/09/0917 ”Mathematical and computer analysis of the evolution processes in nonlinear viscoelastic fluid-like materials”, member of the team
- 2011–2013 201/11/1304 ”Mathematical and numerical modeling of the motion of fluid around obstacles in fixed or varying domains and related problems”, member of the team
- 2016–2018 16-03230S ”Thermodynamically consistent models for fluid flows: mathematical theory and numerical solution”, co-investigator
- 2019–2021 19-04243S ”Partial differential equations in mechanics and thermodynamics of fluids”, co-investigator
- 2022–2024 22-01591S ”Mathematical theory and numerical analysis for equations of viscous Newtonian compressible fluids”, co-investigator

Internal grants UK

- 2002–2003 ”Analýza nelineárních parciálních diferenciálních rovnic metodami teorie regularit”, member of the team
- 2002–2003 ”Klasická a moderní teorie parciálních diferenciálních rovnic”, member of the team

Center of excellence

- 2006–2011 LC06052 Nečas Center for Mathematical Modeling, member of the team

Mobility

- 2015–2016 ”Vícesložkové směsi tekutin: modelování a analýza”, with TU Wien, principal investigator on the Czech side
- 2018–2019 ”Matematické modelování a analýza chemicky reagujících a elektricky nabitych komplexních tekutin”, with TU Wien, member of the team
- 2020–2021 ”Hladkost a kvalitativní chování řešení rozšířených Maxwellových–Stefanových systémů”, with TU Wien, member of the team

Internal grants UP Olomouc

- 1999 3110 3006 ”Matematické metody v mechanice”, principal investigator
- 2000 3110 3007 ”Matematické metody v mechanice II”, member of the team

Other projects

- 1999 ”Fond rozvoje vysokých škol” F 701/99 ”Modernizace výuky matematiky a jejích aplikací”, member of the team
- 2005–2006 joint research project of DAAD (D/04/25763) and the Academy of Sciences of the Czech Republic (D-CZ 3/05-06), with University of Darmstadt, member of the team

- 2009–2010 joint research project of DAAD (D/08/04218) and the Academy of Sciences of the Czech Republic (D4-CZ 1/09-10), with University of Darmstadt, member of the team
- 2017 Aktion: "Analysis of multicomponent fluid dynamical equations", with TU Wien, principal investigator on the Czech side

Stays abroad, series of talks

Stays abroad

- 1994 (April) Uniwersytet Warszawski (1 week)
- 1995 (January) Università di Ferrara (1 month)
- 1996 (March–July, September–October) Université de Toulon et du Var (6 months)
- 1997 (September–December) Université de Toulon et du Var (4 months)
- 1998 (January) Université de Toulon et du Var (1 month)
- 1999 (June) IST Lisboa and Centro Matematico, Coimbra (1 month)
- 1999 (September) Université de Toulon et du Var (2 weeks)
- 2000 (January) Université de Toulon et du Var (1 month)
- 2000 (May) Technische Universität Darmstadt (1 week)
- 2000 (June) Università di Ferrara (1 week)
- 2000 (August–December) University of Missouri (4 months)
- 2001 (January–May) University of Missouri, Columbia (5 months)
- 2001 (June) Université de Toulon et du Var (1 month)
- 2002 (June) Humboldt Universität (1 week)
- 2003 (January) Université de Toulon et du Var (1 month)
- 2004 (January) Université de Toulon et du Var (1 month)
- 2004 (July) Humboldt Universität (2 weeks)

- 2004 (September) Uniwersytet Warszawski (1 week)
- 2005 (January) Université du Sud, Toulon – Var (1 month)
- 2005 (July) Humboldt Universität (1 week)
- 2005 (September) Uniwersytet Warszawski (1 week)
- 2005 (November) Technische Universität Darmstadt (1 week)
- 2006 (February) Université du Sud, Toulon – Var (2 weeks)
- 2006 (June) Humboldt Universität (1 week)
- 2006 (August) Technische Universität Darmstadt (1 week)
- 2006 (September) Uniwersytet Warszawski (1 week)
- 2006 (October) Université du Sud, Toulon – Var (1 month)
- 2006 (December) Humboldt Universität (1 week)
- 2007 (July) Humboldt Universität (1 week)
- 2007 (September) Uniwersytet Warszawski (1 week)
- 2008 (January) Université du Sud, Toulon – Var (1 week)
- 2008 (September) Université du Sud, Toulon – Var (3 weeks)
- 2009 (June) Zhejiang Normal University, Jinhua (1 month)
- 2009 (July) Technische Universität Darmstadt (1 week)
- 2009 (September) Université du Sud, Toulon – Var (1 month)
- 2009 (October) Uniwersytet Warszawski (1 week)
- 2010 (July) Technische Universität Darmstadt (1 week)
- 2010 (October) Uniwersytet Warszawski (1 week)
- 2010 (November) Uniwersytet Warszawski (1 week)
- 2011 (January) Zhejiang Normal University, Jinhua (2 weeks)
- 2011 (October) Uniwersytet Warszawski (1 week)

- 2012 (June) Université de Toulon (3 weeks)
- 2012 (November) Uniwersytet Warszawski (1 week)
- 2013 (June) Université de Toulon (1 month)
- 2013 (October) Uniwersytet Warszawski (1 week)
- 2014 (October) Uniwersytet Warszawski (1 week)
- 2015 (January) Université de Toulon (1 week)
- 2015 (October) Uniwersytet Warszawski (1 week)
- 2015 (November) Technische Universität Wien (1 week)
- 2016 (October) Technische Universität Wien (1 week)
- 2016 (November) Uniwersytet Warszawski (1 week)
- 2017 (March) Technische Universität Wien (1 week)
- 2017 (April) Technische Universität Wien (1 week)
- 2017 (September) Université de Toulon (2 weeks)
- 2017 (November) Uniwersytet Warszawski (1 week)
- 2018 (June) Technische Universität Wien (1 week)
- 2018 (September) Université de Toulon (2 weeks)
- 2018 (November) Uniwersytet Warszawski (1 week)
- 2019 (September) University of Nanjing (2 weeks)
- 2019 (November) Technische Universität Wien (1 week)
- 2019 (December) Uniwersytet Warszawski (1 week)
- 2021 (November) Uniwersytet Warszawski (1 week)
- 2022 (January) IM PAN Warszawa (1 week)
- 2022 (November) Uniwersytet Warszawski Warszawa (1 week)
- 2022 (December) FAU Erlangen–Nürnberg (1 week)

- 2023 (November) Uniwersytet Warszawski Warszawa (1 week)

Series of talks

- 2009 (June) Zhejiang Normal University Jinhua: *Mathematical theory of incompressible Navier–Stokes equations*
- 2010 (October, November) Uniwersytet Warszawski: *Mathematical theory of incompressible Navier–Stokes equations*
- 2011 (January) Zhejiang Normal University Jinhua: *Suitable weak solutions to the incompressible Navier–Stokes equations*
- 2011 (February) Białka Tatrzańska: *Steady compressible Navier–Stokes–Fourier system* (winter school)
- 2013 (February) Białka Tatrzańska: *Suitable weak solutions to the incompressible Navier–Stokes equations* (winter school)
- 2015 (January) Université de Toulon: *Compressible Navier–Stokes equations*
- 2017 (March, April) Technische Universität Wien: *Compressible Navier–Stokes equations*

Invited lectures at conferences

- 1994 Czech–Polish conference on Differential Equations, Katowice
- 1998 Czech–Polish conference on Differential Equations, Katowice
- 1999 Czech–Polish conference on Differential Equations, Olomouc
- 2000 French–Czech conference on Mathematical Fluid Mechanics, Marseille
- 2000 Navier–Stokes equations: theory and numerical methods, Varenna
- 2001 Elliptic and parabolic problems, Rolduc
- 2002 French–Czech conference on Mathematical Fluid Mechanics, Třešť

- 2002 8th International Conference on Navier–Stokes Equations and Related Topics, St. Petersburg
- 2002 Navier–Stokes equations in complex domains, Warsaw
- 2003 Equadiff, Hasselt
- 2003 Regularity and other qualitative prospects of the Navier–Stokes equations, Będlewo
- 2005 3rd IASME/WSEAS Int. Conf. Fluid Mech. & Aerodynamics, Corfu
- 2006 Kyoto Conference on the Navier–Stokes equations and their Applications, Kyoto
- 2006 AIMS’ Sixth International Conference on Dynamical Systems, Differential Equations and Applications, Poitiers
- 2006 Parabolic and Navier–Stokes Equations, Będlewo
- 2007 Nonlocal and Abstract Parabolic Equations and their Applications, Będlewo
- 2007 Equadiff, Wien
- 2007 Fluid-structure interaction problems, Praha
- 2008 WCNA, Orlando
- 2010 AIMS’ Eighth International Conference on Dynamical Systems, Differential Equations and Applications, Dresden
- 2010 Regularity aspects of PDEs, Będlewo
- 2011 Vorticity, Rotation and Symmetry (II): Regularity of Fluid motion, Luminy, Marseille
- 2011 Equadiff, Loughborough
- 2011 International Conference on Fluid and Gas Mechanics, Jinhua
- 2012 6th European Mathematical Congress, Krakow
- 2012 Navier–Stokes and Parabolic equations, Będlewo
- 2012 MathFlows, Ile de Porquerolles

- 2013 International Conference on Mathematical Fluid Mechanics, Nara
- 2013 ODAM, Olomouc
- 2013 Mathematical Hydrodynamics and Parabolic Equations, St. Petersburg
- 2013 Engaging flows, Warszawa
- 2013 SIAM Conference on Analysis of PDEs, Orlando
- 2014 Compflows, Będlewo
- 2014 Vorticity, Rotation and Symmetry (III), Luminy, Marseille
- 2014 AIMS' Tenth International Conference on Dynamical Systems, Differential Equations and Applications, Madrid
- 2015 Workshop on Navier–Stokes equations, Darmstadt
- 2015 Bio+Fluids in Warsaw, Warsaw, Poland
- 2016 The Navier–Stokes Equations and Related Problems, Nagoya
- 2016 AIMS' Eleventh Conference on Dynamical Systems, Differential Equations and Applications, Orlando
- 2016 Seventh European Mathematical Congress, Berlin, July 2016;
- 2016 The First Chinese–Czech Conference on Fluid Mechanics, Beijing
- 2017 Mathflows, Będlewo
- 2017 Theory of the incompressible Navier–Stokes system and related topics, Calais
- 2017 Vorticité, Rotation et Symétrie (IV), Luminy, Marseille
- 2017 Equadiff, Bratislava
- 2017 MORE Conference, Roztoky u Prahy
- 2017 International Conference on Analysis of Classical Incompressible Fluids, Shanghai
- 2018 AIMS' Twelfth Conference on Dynamical Systems, Differential Equations and Applications, Taipei

- 2018 The Second Chinese–Czech Conference on Fluid Mechanics, Praha
- 2018 MathFlows, Ile de Porquerolles
- 2019 Antonín Novotný and his contribution to PDEs, Praha
- 2019 Workshop in occasion of 70th birthday of Professor Jiří Neustupa, Praha
- 2019 Analysis in Missouri, Columbia (MO)
- 2020 Mathflows, Będlewo
- 2020 Vorticité, Rotation et Symétrie (V), Luminy, Marseille (online)
- 2020 Multiscale Models for Complex Fluids: Modeling and Analysis, Banff (online)
- 2021 8th EMC, Portorož (keynote lecture in session) (online)
- 2021 PragueSum (workshop), Praha
- 2021 12th Forum of Partial Differential Equations, Bedlewo
- 2021 3rd Chinese-Czech conference on mathematical fluid mechanics, Xian (online)
- 2022 SIAM conference on analysis of PDEs, Berlin (online)
- 2022 Equadiff, Brno
- 2022 Mathematical Fluid Mechanics in 2022, Praha
- 2022 Against the flow, Będlewo
- 2022 Recent trends in mathematical modelling, Kácov
- 2023 AIMS' Thirteenth Conference on Dynamical Systems, Differential Equations and Applications, Wilmington
- 2023 MUCHA in Fluid Mechanics, Warszawa

Editorial work

- 2001: Editor of the Proceedings of the conference *PDE's and applications, Olomouc 1999*, together with Š. Nečasová, H. Petzeltová and A. Sequeirou (special volume of Mathematica Bohemica)
- Editor of the books: **Handbook of Differential Equations, Evolutionary Equations** (Item 4 (2008) and 5 (2009)), Elsevier, together with C. Dafermos
- Editor of the book: **Selected Works of Jindřich Nečas: PDEs, Continuum Mechanics and Regularity.** Advances in Mathematical Fluid Mechanics. Birkhäuser, Basel, 2015, together with Š. Nečasová and V. Šverák
- Editor of the Lecture Notes from the ESSAM Summer School in Kácov **New Trends and Results in Mathematical Description of Fluid Flows.** Nečas Center Series, Birkhäuser, Basel, 2018, together with M. Bulíček, E. Feireisl
- Editor of a special volume dedicated to Antonín Novotný, Journal of Mathematical Fluid Mechanics, 2022, together with E. Feireisl and G.P. Galdi
- reviews for Zentralblatt (121 reviews)
- reviews for many journals: Acta Mathematicae Applicatae Sinica, Acta Polytechnica, Advances in Nonlinear Analysis, Annales de l'Institut Henri Poincaré/Analyse non linéaire, Annali dell'Università di Ferrara, Annals of Mathematics, Applications of Mathematics, Applicable Analysis, Applied Mathematical Letters, Applied Mathematics and Computation, Archive for Rational Mechanics and Analysis, Archivum Mathematicum, Asymptotic Analysis, Banach Center Publications, Boundary Value Problems, Bulletin of the Malaysian Mathematical Sciences Society, Central European Journal of Mathematics, Chaos: An Interdisciplinary Journal of Nonlinear Science, Cogent Mathematics, Communications on Pure and Applied Mathematics, Communications in Mathematical Sciences, Communications in PDEs, Comm. Math. Univ. Carolinae, Computers and Mathematics with Applications, Contemporary Mathematics, Czechoslovak Mathematical Journal, Differential and Integral Equations, Differential Equations and Applications, Differential Equations and Nonlinear Mechanics, Discrete and Continuous Dynamical Systems, Series A,B,S, Electronic Journal of Diff. Equations, Evolution Equations

& Control Theory, Integral Equations and Operator Theory, International Journal of PDEs, Inventiones Mathematicae, Journal of Differential Equations, Journal of EMS, Journal of Evolutionary Equations, Journal of Functional Analysis, Journal of Math. Analysis and Applications, Journal of Math. Fluid Mechanics, Journal of Mathematical Physics, Journal de Mathématique Pure et Appliquée, Journal of Nonlinear Science, Kinetic & Related Models, Kybernetika, Mathematische Annalen, Mathematica Bohemica, Mathematical Methods in Applied Sciences, Mathematical Problems in Engineering, Mathematische Zeitschrift, Memoirs of AMS, Nonlinear Analysis (TMA), Nonlinear Analysis (RWA), Nonlinear Differential Equations and Applications, Nonlinearity, Proceeding of the Edinburgh Mathematical Society, Proceeding of the London Mathematical Society, Quarterly of Applied Mathematics, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas, SIAM Journal on Mathematical Analysis, Theory and Methods in Nonlinear Analysis, Zeitschrift für Analysis und ihre Anwendungen, Zeitschrift für angewandte Mathematik und Mechanik, Zeitschrift für angewandte Mathematik und Physik

- Awards in reviewing: Excellent Reviewer Nonlinearity (2017) and Journal of Mathematical Analysis and Applications (2013)

Organization work

- 1999: Olomouc, member of the organizing committee of the conference "PDEs and Applications" (conference devoted to 70th birthday of Jindřich Nečas)
- 2005: special session co-organizer devoted to the memory of Jindřich Nečas, Corfu (WSEAS Int. conference of fluid mechanics and aerodynamics)
- 2009: Praha, Nonlinear PDEs (a conference to commemorate the 80th birthday of Jindřich Nečas), member of the organizing committee
- 2012: Praha, Prague SUM school: Non-homogeneous fluids and flows (summer school), member of the organizing committee
- 2013: Praha, Equadiff, member of the organizing committee

- 2014: Madrid, AIMS Conference, co-organizer of a session Recent progress in the mathematical theory of compressible fluid flows (together with E. Feireisl)
- 2015: Będlewo: Mathematical Fluid Mechanics: Old Problems, New Trends — a week for Wojciech Zajączkowski, member of the organizing committee
- 2015: Lyon, Equadiff, co-organizer of a session Fluid models (with E. Feireisl)
- 2016: Beijing, First Chinese–Czech conference on fluid mechanics, member of the organizing committee
- 2017 Kácov, ESSAM school on Mathematical Aspects of Fluid Flows, member of the organizing committee
- 2017 Bratislava, Equadiff, co-organizer of a session Compressible Fluid Flows and Related Topics (together with E. Feireisl)
- 2018 Taipei, AIMS conference, co-organizer of a session Recent trends and progress in mathematical fluid mechanics (together with E. Feireisl and A. Novotný)
- 2018: Praha, The second Chinese–Czech conference of fluid mechanics, member of the organizing committee
- 2019: Kácov, ESSAM school on Mathematical Aspects of Fluid Flows, member of the organizing committee
- 2020 Vorticité, Rotation et Symétrie (V), Luminy, Marseille, member of the scientific committee
- 2022 Workshop "Against the flow", Będlewo, member of organizing and scientific committees

Teaching

- 1993–2000: Olomouc
exercises *Mathematical analysis, Partial differential equations*

lectures: **Partial differential equations** (2-semester course), **Integral transforms**, **Function spaces**, **Variational methods**, **Mathematical methods in fluid mechanics** (2-semester course)
bachelor thesis: 4, master degree thesis: 3 (all successfully defended)

- 2000–2001: Columbia, MO
Calculus (course in English)
- 2001– : Praha
exercises: *Mathematical analysis*, *Mathematics for physicists*, *Partial differential equations*
lectures: **Mathematics for physicists** (5-semester course), **Partial differential equations** (2-semester course), **Mathematical theory of the incompressible Navier–Stokes equations**, **Mathematical theory of equations of compressible flows**, **Regularity of solutions to the Navier–Stokes equations**, **Mathematical analysis of models describing the motion of bodies in fluids**
seminars: *Seminar on PDEs* (Academy of Sciences, with Š. Nečasová and E. Feireisl), *Seminar on regularity of Navier–Stokes equations* (Academy of Sciences, with Š. Nečasová and P. Kaplický)
bachelor thesis: 4, master degree thesis: 5, doctoral thesis: 3 in Prague, 1 in Warsaw (all successfully defended), 1 "Mémoire de stage" (University of Toulon) successfully defended, 2 new doctoral students since 2019
- 2011– : head of the doctoral study branch Mathematical and computer modeling

Teaching materials

- Lecture: **Mathematical theory of the incompressible Navier–Stokes equations**
 - Lecture notes in Czech:
[http://www.karlin.mff.cuni.cz/~pokorny/
LectureNotes/NS.pdf](http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/NS.pdf) (71 pages)
 - Lecture notes in English:
[http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/
NavierandStokes_eng.pdf](http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/NavierandStokes_eng.pdf) (76 pages)

- Lecture: **Regularity of solutions to the Navier–Stokes equations**
 - Lecture notes in Czech:
http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/regularita_NS.pdf (56 pages)
- Lecture: **Mathematical theory of equations of compressible flows**
 - Lecture notes in English (with Eduard Feireisl):
http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/Feireisl_Pokorny_Compressible.pdf (112 pages)
- Lecture: **Partial differential equations**
 - Lecture notes (partly in Czech and in English, with several co-authors):
http://www.karlin.mff.cuni.cz/~pokorny/LectureNotes/moderni_teorie.pdf (322 pages)
- Lecture: **Mathematics for physicists I–V**
 - Lecture notes in Czech (with Robert Černý):
 - Part 1: Robert Černý, Milan Pokorný: **Základy matematické analýzy pro studenty fyziky 1**, MatfyzPress 2020.
 - Part 2: Robert Černý, Milan Pokorný: **Základy matematické analýzy pro studenty fyziky 2**, MatfyzPress 2021.
 - Part 3: Robert Černý, Milan Pokorný: **Základy matematické analýzy pro studenty fyziky 3**, MatfyzPress 2023.
 - Part 4: http://www.karlin.mff.cuni.cz/~pokorny/stary_web/skripta_MAF4.pdf (317 pages)
 - Part 5: http://www.karlin.mff.cuni.cz/~pokorny/stary_web/skripta_MAF5.pdf (283 pages)
 - List of exercises:
<https://www2.karlin.mff.cuni.cz/~pokorny/index.php?a=teach1>
<https://www2.karlin.mff.cuni.cz/~pokorny/index.php?a=teach4>
http://www.karlin.mff.cuni.cz/~pokorny/stary_web/fyz1c.html
http://www.karlin.mff.cuni.cz/~pokorny/stary_web/fyz1d.html

[http://www.karlin.mff.cuni.cz/~pokorny/
stary_web/fyz1e.html](http://www.karlin.mff.cuni.cz/~pokorny/stary_web/fyz1e.html)

Others

- knowledge of languages: English, French, German, Russian (state exam 1987 German, 1988 Russian)
- driving licence: B