## **Bibliography**

- [Ada75] Robert A. Adams. *Sobolev Spaces*. Orlando, Florida: Academic Press, 1975.
- [AMR88] Ralph Abraham, Jerrold E. Marsden, and Tudor Ratiu. *Manifolds, Tensor Analysis, and Applications*. Second edition. Vol. 75. Applied Mathematical Sciences. New York: Springer, 1988.
- [And11] John D. Anderson Jr. Fundamentals of Aerodynamics. Fifth edition. New York: McGraw-Hill, 2011.
- [Bat87] George K. Batchelor. An Introduction to Fluid Dynamics. Cambridge: Cambridge University Press, 1987.
- [BB67] Paul L. Butzer and Hubert Berens. Semi-Groups of Operators and Approximation. Vol. 145. Die Grundlehren der mathematischen Wissenschaften. New York: Springer-Verlag, 1967.
- [Ber51] Ratip Berker. "Sur certaines propriétiés de l'effort qui s'exerce sur une paroi en contact avec un fluide visqueux." In: *Comptes rendus de l'Academy des Sciences de Paris* 258 (1951), pp. 148–149.
- [BL76] Jöran Bergh and Jörgen Löfstrom. *Interpolation Spaces. An Introduction*. New York: Springer-Verlag, 1976.
- [Bow76] Ray M. Bowen. "Theory of mixtures." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. III: Mixtures and EM field theories. New York: Academic Press, 1976, pp. 1–127.
- [BS88] Colin Bennett and Robert Sharpley. *Interpolation of Operators*. Vol. 129. Pure and Applied Mathematics. New York: Academic Press, 1988.
- [Cab60] Henri Cabannes. "Théorie des ondes de choc." In: Fluid Dynamics III. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 162–224.

[Cam63] Ali B. Cambel. *Plasma Physics and Magnetofluid mechanics*. New York: McGraw-Hill, 1963.

- [Car71] Henri Cartan. Differential Forms. Paris: Hermann, 1971.
- [CDD82] Yvonne Choquet-Bruhat, Cécile DeWitt-Morette, and Margaret Dillard-Bleick. Analysis, Manifolds and Physics. Revised edition. New York: Elsevier, 1982.
- [CH53] Richard Courant and David Hilbert. *Methods of Mathematical Physics*. Vol. I. New York: Interscience, 1953.
- [CH62] Richard Courant and David Hilbert. *Methods of Mathematical Physics*. Vol. II. New York: Interscience, 1962.
- [Cha75] Tien Sun Chang. "Constitutive equations for simple materials. Thermoviscous fluids." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 267–281.
- [Cha91] Jan Chabrowski. The Dirichlet Problem with L<sup>2</sup>-Boundary Data for Elliptic Linear Systems. Vol. 1482. Lecture Notes in Mathematics. New York: Springer-Verlag, 1991.
- [Chu88] T. J. Chung. *Continuum Mechanics*. Englewood Cliffs, New Jersey: Prentice Hall, 1988.
- [CK92] David Colton and Rainer Kress. Inverse Acoustic and Electromagnetic Scattering Theory. Vol. 93. Applied Mathematical Sciences. New York: Springer-Verlag, 1992.
- [CM90] Alexandre J. Chorin and Jerrold E. Marsden. A Mathematical Introduction to Fluid Mechanics. Second edition. Berlin: Springer-Verlag, 1990.
- [CMN66] Bernard D. Coleman, Hershel Markovitz, and Walter Noll. Viscometric Flows of Non-Newtonian Fluids. Theory and Experiment. Vol. 5. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1966.
- [CN59] Bernard D. Coleman and Walter Noll. "On certain steady flows of general fluids." In: *Archive for Rational Mechanics and Analysis* 3 (1959), pp. 289–303.

[Col70] R. E. Collins. "Embedding concepts in statistical thermodynamics." In: A Critical Review of Thermodynamics. Ed. by Edward B. Stuart, Benjamin Gal-Or, and Alan J. Brainard. University of Pennsylvania School of Engineering Publication Series 3. Baltimore: Mono Book Corp., 1970, pp. 19–36.

- [CW75] Allen T. Chwang and T. Yao-Tsu Wu. "Hydromechanics of low-Reynolds-number flow. Part 2. Singularity method for Stokes flows." In: *Journal of Fluid Mechanics* 67.4 (1975), pp. 787–815.
- [de 55] Georges de Rham. Variétés Différentiables. Paris: Hermann, 1955.
- [Dei85] Klaus Deimling. Nonlinear Functional Analysis. New York: Springer-Verlag, 1985.
- [Deu09] Paul Deuring. "Spatial decay of time-dependent Oseen flows." In: SIAM Journal on Mathematical Analysis 41.3 (2009), pp. 886–922.
- [Dez87] Aleksei A. Dezin. *Partial Differential Equations*. Springer Series in Soviet Mathematics. New York: Springer-Verlag, 1987.
- [Dil75] Ellis H. Dill. "Constitutive equations for simple materials. Simple materials with fading memory." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 283–403.
- [DLMF] NIST Digital Library of Mathematical Functions. URL: http://dlmf.nist.gov/. Frank W. J. Olver, Adri B. Olde Daalhuis, Daniel W. Lozier, Barry I. Schneider, Ronald F. Boisvert, Charles W. Clark, Bruce R. Miller, Bonita V. Saunders, Howard S. Cohl, Marjorie A. McClain, editors.
- [Doe37] Gustav Doetsch. Theorie und Anwendung der Laplace-Transformation. Vol. 47. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen mit besonderer Berücksichtigung der Anwendungsebiete. Berlin: Springer-Verlag, 1937. Reprinted New York: Dover Publications, 1943.
- [DS58] Nelson Dunford and Jacob T. Schwartz. *Linear Operators. Part I: General Theory.* Vol. 7. Pure and Applied Mathematics. New York: John Wiley & Sons, 1958.
- [DS63] Nelson Dunford and Jacob T. Schwartz. *Linear Operators. Part II: Spectral Theory.* Vol. 7. Pure and Applied Mathematics. New York: John Wiley & Sons, 1963.

[DS71] Nelson Dunford and Jacob T. Schwartz. *Linear Operators. Part III: Spectral Operators.* Vol. 7. Pure and Applied Mathematics. New York: John Wiley & Sons, 1971.

- [Ede76] Dominic G. B. Edelen. "Nonlocal field theories." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. IV: Polar and nonlocal field theories. New York: Academic Press, 1976, pp. 75–204.
- [Ein26] Albert Einstein. Investigations on the Theory of the Brownian Movement. London: Methuen, 1926. Reprinted New York: Dover Publications, 1956.
- [EK76] A. Cemal Eringen and Charles B. Kafadar. "Polar field theories." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. IV: Polar and nonlocal field theories. New York: Academic Press, 1976, pp. 1–73.
- [EM90a] A. Cemal Eringen and Gérard A. Maugin. *Electrodynamics of Continua I: Foundations and Solid Media*. New York: Springer-Verlag, 1990.
- [EM90b] A. Cemal Eringen and Gérard A. Maugin. Electrodynamics of Continua II: Fluids and Complex Media. New York: Springer-Verlag, 1990.
- [Erd56] Arthur Erdélyi. Asymptotic Expansions. New York: Dover Publications, 1956.
- [Erd75] Fazil Erdogan. "Methods of solution. Complex function technique." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 523–603.
- [Eri71a] A. Cemal Eringen, ed. *Continuum Physics*. Vol. I: Mathematics. New York: Academic Press, 1971.
- [Eri71b] A. Cemal Eringen. "Tensor analysis." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 1–155.
- [Eri75a] A. Cemal Eringen. "Basic principles. Balance laws." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 69–88.

[Eri75b] A. Cemal Eringen. "Basic principles. Deformation and motion." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 3–67.

- [Eri75c] A. Cemal Eringen. "Basic principles. Thermodynamics of continua." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 89–127.
- [Eri75d] A. Cemal Eringen. "Constitutive equations for simple materials. General theory." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 131–172.
- [Eri75e] A. Cemal Eringen, ed. Continuum Physics. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975.
- [Eri76a] A. Cemal Eringen, ed. *Continuum Physics*. Vol. III: Mixtures and EM field theories. New York: Academic Press, 1976.
- [Eri76b] A. Cemal Eringen, ed. *Continuum Physics*. Vol. IV: Polar and nonlocal field theories. New York: Academic Press, 1976.
- [Eri76c] A. Cemal Eringen. "Nonlocal polar field theories." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. IV: Polar and nonlocal field theories. New York: Academic Press, 1976, pp. 205–267.
- [Eva10] Lawrence C. Evans. Partial Differential Equations. Second edition. Vol. 19. Graduate Studies in Mathematics. Providence, Rhode Island: American Mathematical Society, 2010.
- [Eva90] Lawrence C. Evans. Weak Convergence Methods for Nonlinear Partial Differential Equations. Conference Board of the Mathematical Sciences Regional Conference Series in Mathematics 74. Providence, Rhode Island: American Mathematical Society, 1990.
- [Evg89] Marat A. Evgrafov. "Series and Integral Representations." In: Analysis I. Integral Representations and Asymptotic Methods.
   Ed. by Revaz V. Gamkrelidze. Vol. 13. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1989, pp. 1–81.

[FB08] Giorigio Ferrarese and Donato Bini. *Introduction to Relativistic Continuum Mechanics*. Vol. 727. Lecture Notes in Physics. Berlin Heidelberg: Springer, 2008.

- [Fed89a] M. V. Fedoryuk. "Asymptotic Methods in Analysis." In: Analysis I. Integral Representations and Asymptotic Methods. Ed. by Revaz V. Gamkrelidze. Vol. 13. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1989, pp. 83–191.
- [Fed89b] M. V. Fedoryuk. "Integral Transforms." In: Analysis I. Integral Representations and Asymptotic Methods. Ed. by Revaz V. Gamkrelidze. Vol. 13. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1989, pp. 193–232.
- [Fer71] Norman M. Ferrers, ed. Mathematical Papers of the Late George Green. London: MacMillan and Company, 1871. Reprinted Bronx, New York: Chelsea Publications, 1970.
- [Fol76] Gerald B. Folland. Introduction to Partial Differential Equations. Princeton University Press, 1976.
- [Fra12] Theodore Frankel. The Geometry of Physics: an Introduction. Third edition. Cambridge University Press, 2012.
- [Fri64] Avner Friedman. Partial Differential Equations of Parabolic Type. Englewood Cliffs, New Jersey: Prentice Hall, 1964.
- [Ful78] Watson B. Fulks. Advanced Calculus. Third edition. New York: Wiley, 1978.
- [Gal94] Giovanni P. Galdi. An Introduction to the Mathematical Theory of the Navier-Stokes Equations. Volume I. Linearised Steady Problems. Vol. 38. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1994.
- [Gil60] David Gilbarg. "Jets and cavities." In: Fluid Dynamics III. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 311–445.
- [GL88] Ronald B. Guenther and John W. Lee. Partial Differential Equations of Mathematical Physics and Integral Equations. Englewood Cliffs, New Jersey: Prentice Hall, 1988.
- [GP83] Casper Goffman and George Pedrick. First Course in Functional Analysis. Second edition. New York: Chelsea Publishing Company, 1983.

[GR13] Ronald B. Guenther and Ernest L. Roetman. "Uniqueness and nonuniqueness of the Stokes and Oseen flows." In: *Journal of Fixed Point Theory and Applications* 13.2 (2013), pp. 519–527. ISSN: 1661-7738; 1661-7746/e.

- [GR80] Izrail S. Gradshteyn and Iosif M. Ryzhik. Table of Integrals, Series, and Products. Fourth edition. New York: Academic Press, 1980.
- [Gro76] Richard A. Grot. "Relativistic continuum physics: electromagnetic interactions." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. III: Mixtures and EM field theories. New York: Academic Press, 1976, pp. 129–219.
- [GS64] Israel M. Gelfand and Georgiy E. Shilov. Generalized Functions.Vol. 1. Russian original 1958. Academic Press, 1964.
- [GS67] Israel M. Gelfand and Georgiy E. Shilov. Generalized Functions. Vol. 3. Academic Press, 1967.
- [GT07] Ronald B. Guenther and Enrique A. Thomann. "Fundamental solution of Stokes and Oseen problem in two spatial dimensions." In: Journal of Mathematical Fluid Mechanics 9 (2007), pp. 489–505.
- [GT83] David Gilbarg and Neil S. Trudinger. Elliptic Partial Differential Equations of Second Order. Second edition. Vol. 224. Die Grundlehren der mathematischen Wissenschaften. New York: Springer-Verlag, 1983.
- [Gur81] Morton E. Gurtin. An Introduction to Continuum Mechanics. Vol. 158. Mathematics in Science and Engineering. New York: Academic Press, 1981.
- [Hel58] Hermann von Helmholtz. "Über Integrale der hydrodynamischen Gleichungen, welche den Wirbelbewegungen entsprechen." In: Journal für die Reine und Angewandte Mathematik 55 (1858), pp. 25–55.
- [Hel60] Günter Hellwig. Partielle Differentialgleichungen. English translation 1964, Partial Differential Equations: an Introduction, Blaisdell. Stuttgart: Teubner, 1960.
- [Hel64] Günter Hellwig. Partial Differential Equations. New York: Blaisdell, 1964.

[Hör83a] Lars Hörmander. The Analysis of Linear Partial Differential Operators I. Distribution Theory and Fourier Analysis. Vol. 256. Grundlehren der mathematischen Wissenshaften. New York: Springer-Verlag, 1983.

- [Hör83b] Lars Hörmander. The Analysis of Linear Partial Differential Operators II. Differential Operators with Constant Coefficients.
   Vol. 257. Grundlehren der mathematischen Wissenshaften. Second revised printing 1990. New York: Springer-Verlag, 1983.
- [Hör85a] Lars Hörmander. The Analysis of Linear Partial Differential Operators III. Pseudo-Differential Operators. Vol. 274. Grundlehren der mathematischen Wissenshaften. New York: Springer-Verlag, 1985.
- [Hör85b] Lars Hörmander. The Analysis of Linear Partial Differential Operators IV. Fourier Integral Operators. Vol. 275. Grundlehren der mathematischen Wissenshaften. New York: Springer-Verlag, 1985.
- [Hun65] J. N. Hunt. *Incompressible Fluid Dynamics*. New York: American Elsevier, 1965.
- [Hur65] Harry H. Hurt Jr. Aerodynamics for Naval Aviators (NAVWEPS 00-80T-80). ASA FAA Handbook Series. Aviation Supplies and Academics, 1965.
- [HvU10] Kolumban Hutter, Alfons A. F. van den Ven, and Ana Urescu. Electromagnetic Field Matter Interactions in Thermoelastic Solids and Viscous Fluids. Vol. 710. Lecture Notes in Physics. Berlin: Springer-Verlag, 2010.
- [IKO62] Arlen M. Il'in, Anatolii S. Kalashnikov, and Olga A. Oleinik. "Second order linear equations of parabolic type." In: *Uspekhi Matematicheskikh Nauk* 17.3 (1962). English translation in *Russian Mathematical Surveys*, vol. 17, no. 3, 1962, pp. 3–146.
- [Joh55] Fritz John. Plane Waves and Spherical Means Applied to Partial Differential Equations. New York: Interscience Publishers, 1955.
- [Joh82] Fritz John. Partial Differential Equations. Fourth edition. Vol. 1. Applied Mathematical Sciences. New York: Springer-Verlag, 1982.
- [Jon71] Alfred W. Jones. "Group theory." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 157–237.

[Jos06] Daniel D. Joseph. "Potential flow of viscous fluids: historical notes." In: *International Journal of Multiphase Flow* 32.3 (2006), pp. 285–310.

- [Jos13] Jürgen Jost. Partial Differential Equations. Third edition. Vol. 214. Graduate Texts in Mathematics. New York: Springer-Verlag, 2013.
- [Jos76a] Daniel D. Joseph. Stability of Fluid Motions I. Vol. 27. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1976.
- [Jos76b] Daniel D. Joseph. Stability of Fluid Motions II. Vol. 28. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1976.
- [Kaf75] Charles B. Kafadar. "Methods of solution. Exact solutions in fluids and solids." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 407–448.
- [KE90] Ehran Kiral and A. Cemal Eringen. Constitutive Equations of Nonlinear Electromagnetic-Elastic Crystals. New York: Springer-Verlag, 1990.
- [Kel29] Oliver D. Kellogg. Foundations of Potential Theory. Springer-Verlag, 1929. Reprinted New York: Dover Publications, 1953.
- [KF57] Andrey N. Kolmogorov and Sergei V. Fomin. Elements of the Theory of Functions and Functional Analysis I. Metric and Normed Spaces. Rochester, New York: Graylock Press, 1957.
- [KF61] Andrey N. Kolmogorov and Sergei V. Fomin. Elements of the Theory of Functions and Functional Analysis II. Measure. The Lebesgue Integral. Hilbert Space. Baltimore, Maryland: Graylock Press, 1961.
- [KK05] Sangtae Kim and Seppo J. Karrila. Microhydrodynamics: Principles and Selected Applications. New York: Dover Publications, 2005. Reprint of Boston and London: Butterworth-Heinemann, 1991.
- [KL57] Saul Kaplun and Paco A. Lagerstrom. "Asymptotic expansions of Navier-Stokes solutions for small Reynolds numbers." In: *Journal of Mathematics and Mechanics* 6.5 (1957), pp. 585–593.

[KN91] Lev D. Kudryavtsev and Sergey M. Nikol'skiĭ. "Spaces of Differentiable Functions of Several Variables and Imbedding Theorems." In: Analysis III. Spaces of Differentiable Functions. Ed. by Sergey M. Nikol'skiĭ. Vol. 26. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1991, pp. 1–140.

- [Kre89] Rainer Kress. *Linear Integral Equations*. Vol. 82. Applied Mathematical Sciences. New York: Springer-Verlag, 1989.
- [KSG64] N. S. Koshlyakov, M. M. Smirnov, and E. B. Gliner. Differential Equations of Mathematical Physics. Amsterdam: North-Holland Publishing Company, 1964.
- [Kup65] Viktor D. Kupradze. Potential Methods in the Theory of Elasticity. Jerusalem: Israel Program for Scientific Translations, 1965.
- [Lad63] Olga A. Ladyzhenskaya. The Mathematical Theory of Viscous Incompressible Flow. New York: Gordon and Breach, 1963.
- [Lad85] Olga A. Ladyzhenskaya. The Boundary Value Problems of Mathematical Physics. Vol. 49. Applied Mathematical Sciences. New York: Springer-Verlag, 1985.
- [Lam95] Horace Lamb. *Hydrodynamics*. Cambridge University Press, 1895.
- [Lan97] Evgenii M. Landis. Second Order Equations of Elliptic and Parabolic Type. Vol. 171. Translations of Mathematical Monographs. Providence, Rhode Island: American Mathematical Society, 1997.
- [Lav67] M. M. Lavrentiev. Some Improperly Posed Problems of Mathematical Physics. Vol. 11. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1967.
- [Lee13] John M. Lee. Introduction to Smooth Manifolds. Second edition. Vol. 218. Graduate Texts in Mathematics. New York: Springer-Verlag, 2013.
- [Lig64] M. James Lighthill. Fourier Analysis and Generalised Functions. Cambridge University Press, 1964.
- [Lin67] C. C. Lin. *The Theory of Hydrodynamic Stability*. New York: Cambridge University Press, 1967.
- [Liu02] I-Shih Liu. Continuum Mechanics. New York: Springer-Verlag, 2002.
- [LL01] Elliot H. Lieb and Michael Loss. Analysis. Second edition. Vol. 14. Graduate Studies in Mathematics. Providence, Rhode Island: American Mathematical Society, 2001.

[Lov27] Augustus E. H. Love. A Treatise on the Mathematical Theory of Elasticity. Cambridge University Press, 1927. Reprinted New York: Dover Publications, 1944.

- [LS61] Lazar A. Liusternik and Vladimir J. Sobolev. *Elements of Functional Analysis*. New York: Frederick Unger, 1961.
- [Mar62] Jean-Paul Marchand. *Distributions, an Outline*. New York: Interscience Publishers, 1962.
- [Mar69] Jürg T. Marti. Introduction to the Theory of Bases. Vol. 18. Springer Tracts in Natural Philosophy. New York: Springer-Verlag, 1969.
- [Mau13] Gérard A. Maugin. Continuum Mechanics Through the Twentieth Century. Solid Mechanics and Its Applications 196. Dordrecht Heidelberg New York London: Springer, 2013.
- [Mau76] Gérard A. Maugin. "Relativistic continuum physics: micromagnetism." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. III: Mixtures and EM field theories. New York: Academic Press, 1976, pp. 221–312.
- [Maz85] Vladimir G. Maz'ja. *Sobolev Spaces*. Springer Series in Soviet Mathematics. New York: Springer, 1985.
- [Maz91a] Vladimir G. Maz'ya. "Boundary Integral Equations." In: Analysis IV. Linear and Boundary Integral Equations. Ed. by Vladimir G. Maz'ya and Sergey M. Nikol'skiĭ. Vol. 27. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1991, pp. 128–222.
- [Maz91b] Vladimir G. Maz'ya. "Classes of Domains, Measures and Capacities in the Theory of Differentiable Functions." In: Analysis III. Spaces of Differentiable Functions. Ed. by Sergey M. Nikol'skiĭ. Vol. 26. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1991, pp. 141–211.
- [McC75] Matthew F. McCarthy. "Methods of solution. Singular surfaces and waves." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 449–521.
- [Mei02] C. C. Mei. Oseen's improvement for slow flow past a body. Notes on 1.63 Advanced Environmental Fluid Mechanics. Dec. 2002.

[Mei70] Josef Meixner. "On the foundation of thermodynamics of processes." In: A Critical Review of Thermodynamics. Ed. by Edward B. Stuart, Benjamin Gal-Or, and Alan J. Brainard. University of Pennsylvania School of Engineering Publication Series 3. Baltimore: Mono Book Corp., 1970, pp. 37–47.

- [Mey60] Richard E. Meyer. "Theory of characteristics of inviscid gas dynamics." In: Fluid Dynamics III. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 225–282.
- [Mey82] Richard E. Meyer. Introduction to Mathematical Fluid Dynamics. New York: Dover Publications, 1982.
- [MF53a] Phillip M. Morse and Herman Feshbach. *Methods of Theoretical Physics*. New York: McGraw-Hill Book Company, 1953.
- [MF53b] Phillip M. Morse and Herman Feshbach. *Methods of Theoretical Physics, part I.* New York: McGraw-Hill Book Company, 1953.
- [MF53c] Phillip M. Morse and Herman Feshbach. *Methods of Theoretical Physics, part II.* New York: McGraw-Hill Book Company, 1953.
- [Mik65] Solomon G. Mikhlin. Multidimensional Singular Integrals and Integral Equations. Oxford: Pergamon Press, 1965.
- [Mik78] V. P. Mikhailov. Partial Differential Equations. Moscow: Mir Publishers, 1978.
- [Mil73] Louis M. Milne-Thomson. *Theoretical Aerodynamics*. Fourth edition. New York: Dover Publications, 1973.
- [Mil96] Louis M. Milne-Thomson. *Theoretical Hydrodynamics*. Fifth edition. New York: Dover Publications, 1996.
- [Mit70] Dragoslav S. Mitrinović. Analytic Inequalities. Vol. 165. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen. Springer-Verlag, 1970.
- [Mor01] Shigeyuki Morita. Geometry of Differential Forms. Vol. 201. Translations of Mathematical Monographs. Providence, Rhode Island: American Mathematical Society, 2001.
- [MOS66] Wilhelm Magnus, Fritz Oberhettinger, and Raj P. Soni. Formulas and Theorems for the Special Functions of Mathematical Physics. Third edition. Vol. 52. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen. New York: Springer-Verlag, 1966.

[MP86] Solomon G. Mikhlin and Siegfried Prössdorf. Singular Integral Operators. New York: Springer-Verlag, 1986.

- [Mül57] Claus Müller. Grundprobleme der mathematischen Theorie elektromagnetischer Schwingungen. Vol. 88. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen. English translation 1969, Foundations of the Mathematical Theory of Electromagnetic Waves, Springer-Verlag, Berlin. Berlin: Springer-Verlag, 1957.
- [Mül85] Ingo Müller. Thermodynamics. London: Pitman, 1985.
- [Mus58] Nikolai I. Muskhelishvili. Singular Integral Equations. Groningen: P. Noordhoff N. V., 1958.
- [Nav21] Claude-Louis M. H. Navier. "Sur les Lois de mouvemens de fluides, en ayant égard à l'adhésion des molécules." In: *Annales de Chimie et de Physique* 19 (1821), pp. 244–260.
- [Niv90a] W. D. Niven, ed. The Scientific Papers of James Clerk Maxwell. Vol. 1. Cambridge University Press, 1890. Reprinted New York: Dover Publications, 2003.
- [Niv90b] W. D. Niven, ed. The Scientific Papers of James Clerk Maxwell. Vol. 2. Cambridge University Press, 1890. Reprinted New York: Dover Publications, 2003.
- [Nol58] Walter Noll. "A mathematical theory of the mechanical behavior of continuous media." In: Archive for Rational Mechanics and Analysis 2 (1958), pp. 197–226.
- [Nol59] Walter Noll. "The foundations of classical mechanics in the light of recent advances in continuum mechanics." In: *The Axiomatic Method with Special Reference to Geometry and Physics.* Ed. by Leon Henkin, Patrick Suppes, and Alfred Tarski. Amsterdam: North-Holland, 1959, pp. 266–281.
- [NSS59] Helen K. Nickerson, Donald C. Spencer, and Norman E. Steenrod. Advanced Calculus. Princeton, New Jersey: D. Van Nostrand Company, 1959.
- [Obe57] Fritz Oberhettinger. Tabellen zur Fourier Transformation. Vol. 90. Die Grundlehren der mathematischen Wissenshaften in Einzeldarstellungen. Berlin: Springer-Verlag, 1957.

[Obe73] Fritz Oberhettinger. Fourier Transforms of Distributions and Their Inverses: a Collection of Tables. Vol. 16. Probability and Mathematical Statistics. New York: Academic Press, 1973. Reprinted 2014.

- [Obe90] Fritz Oberhettinger. Tables of Fourier Transforms and Fourier Transforms of Distributions. New York: Springer-Verlag, 1990.
- [Odq30] Folke K. G. Odqvist. "Über die Randwertaufgaben der Hydrodynamik zäher Flüssigkeiten." In: *Mathematische Zeitschrift* 32 (1930), pp. 329–375.
- [Odq32] Folke K. G. Odqvist. "Beiträge zur Theorie der nichtstationären zähen Flüssigkeitsbewegungen. I." In: Arkiv för Matematik, Astronomi och Fysik 22.28 (1932), pp. 1–22. ISSN: 0365-4133.
- [Old50] James G. Oldroyd. "On the formulation of rheological equations of state." In: *Proceedings of the Royal Society of London A* 200 (1063 Feb. 1950), pp. 523–541. ISSN: 0080-4630.
- [Ose10] Carl W. Oseen. "Über die Stokes'sche Formel und über eine verwandte Aufgabe in der Hydrodynamik." In: Arkiv för Matematik, Astronomi och Fysik 6.29 (1910).
- [Ose27] Carl W. Oseen. Neuere Methoden und Ergebnisse in der Hydrodynamik. Leipzig: Akademische Verlagsgesellschaft M B H, 1927.
- [Paz83] Amnon Pazy. Semigroups of Linear Operators and Applications to Partial Differential Equations. Vol. 44. Applied Mathematical Sciences. Second printing. New York: Springer-Verlag, 1983.
- [PBM86a] Anatoliĭ P. Prudnikov, Yuriĭ A. Brychkov, and Oleg I. Marichev. Integrals and Series. Volume 1: Elementary Functions. New York: Gordon and Breach Science Publishers, 1986.
- [PBM86b] Anatoliĭ P. Prudnikov, Yuriĭ A. Brychkov, and Oleg I. Marichev. Integrals and Series. Volume 2: Special Functions. New York: Gordon and Breach Science Publishers, 1986.
- [PBM90] Anatoliĭ P. Prudnikov, Yuriĭ A. Brychkov, and Oleg I. Marichev. Integrals and Series. Volume 3: More Special Functions. New York: Gordon and Breach Science Publishers, 1990.
- [Phi33] Henry B. Phillips. Vector Analysis. New York: John Wiley, 1933.

[Pos97] E. J. Post. Formal Structure of Electromagnetics: General Covariance and Electromagnetics. New York: Dover Publications, 1997. Reprint of New York: Interscience Publishers, 1963.

- [PP57] Ian Proudman and J. R. A. Pearson. "Expansions at small Reynolds numbers for the flow past a sphere and a circular cylinder." In:

  Journal of Fluid Mechanics 2.3 (1957), pp. 237–262.
- [Pri70] Ilya Prigogine. "Dynamic foundations of thermodynamics and statistical mechanics." In: A Critical Review of Thermodynamics. Ed. by Edward B. Stuart, Benjamin Gal-Or, and Alan J. Brainard. University of Pennsylvania School of Engineering Publication Series 3. Baltimore: Mono Book Corp., 1970, pp. 1–18.
- [Prö91] Siegfried Prössdorf. "Linear Integral Equations." In: Analysis IV. Linear and Boundary Integral Equations. Ed. by Vladimir G. Maz'ya and Sergey M. Nikol'skiĭ. Vol. 27. Encyclopaedia of Mathematical Sciences. New York: Springer-Verlag, 1991, pp. 1– 125.
- [PT57] Ludwig Prandtl and Oskar K. G. Tietjens. Fundamentals of Hydro- and Aeromechanics. New York: Dover Publications, 1957. Reprint of 1934 edition.
- [RE55] Ronald S. Rivlin and Jerald L. Ericksen. "Stress-deformation relations for isotropic materials." In: *Journal for Rational Mechanics and Analysis* 4 (1955), pp. 323–425.
- [Roe67] Ernest L. Roetman. "On the biharmonic wave equation." In: Pacific Journal of Mathematics 22 (1967), pp. 139–158. ISSN: 1945-5844; 0030-8730/e.
- [Růž00] Michael Růžička. Electrorheological Fluids: Modeling and Mathematical Theory. Vol. 1748. Lecture Notes in Mathematics. New York: Springer-Verlag, 2000.
- [Sam71] J. Clifton Samuels. "Elements of stochastic processes." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 605–663.
- [SC01] Jian-Jun Shu and Allen T. Chwang. "Generalized fundamental solutions for unsteady viscous flows." In: *Physical Review E* 63 (5 Apr. 2001), p. 051201.
- [Sch50] Laurent Schwartz. *Théorie des Distributions*. Vol. 1. Paris: Hermann & Cie, 1950.

[Sch51] Laurent Schwartz. *Théorie des Distributions*. Vol. 2. Paris: Hermann & Cie, 1951.

- [Sch60a] Menahem Schiffer. "Analytical theory of subsonic and supersonic flows." In: Fluid Dynamics III. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 1–161.
- [Sch60b] Hermann Schlichting. Boundary Layer Theory. New York: McGraw-Hill, 1960.
- [Ser59] James B. Serrin. "Mathematical principles of classical fluid mechanics." In: *Fluid Dynamics I*. Ed. by Siegfried Flügge. Vol. VIII/1. Encyclopedia of Physics. Berlin: Springer-Verlag, 1959, pp. 125–263.
- [Ser86a] James B. Serrin. "An outline of thermodynamic structure." In: New Perspectives in Thermodynamics. Ed. by James B. Serrin. New York: Springer-Verlag, 1986, pp. 3–32.
- [Ser86b] James B. Serrin, ed. New Perspectives in Thermodynamics. New York: Springer-Verlag, 1986.
- [SGB70] Edward B. Stuart, Benjamin Gal-Or, and Alan J. Brainard, eds. A Critical Review of Thermodynamics. University of Pennsylvania School of Engineering Publication Series 3. Baltimore: Mono Book Corp., 1970.
- [Šil86] Miroslav Šilhavý. "Foundations of continuum thermodynamics." In: New Perspectives in Thermodynamics. Ed. by James B. Serrin. New York: Springer-Verlag, 1986, pp. 33–48.
- [Sma74] D. R. Smart. Fixed Point Theorems. Vol. 66. Cambridge Tracts in Mathematics. Cambridge University Press, 1974.
- [Smi87] S. H. Smith. "A note on the Stokes paradox." In: Quarterly of Applied Mathematics 45 (1987), pp. 529–531.
- [Smi94] Gerald F. Smith. Constitutive Equations for Anisotropic and Isotropic Materials. New York: North-Holland, 1994.
- [Sne51] Ian N. Sneddon. Fourier Transforms. New York: McGraw-Hill, 1951. Reprinted New York: Dover Publications, 1995.
- [Sne56] Ian N. Sneddon. Special Functions of Mathematical Physics and Chemistry. New York: Interscience Publishers, 1956.

[Sne71] Ian N. Sneddon. "Functional analysis." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 355–490.

- [Sol02] Vsevolod A. Solonnikov. "Potential theory for the nonstationary Stokes problem in nonconvex domains." In: Nonlinear Problems in Mathematical Physics and Related Topics I. In Honor of Professor O. A. Ladyzhenskaya. Ed. by M. S. Birman et al. New York: Kluwer Academic/Plenum Publishers, 2002, pp. 349–372.
- [Sol03a] Vsevolod A. Solonnikov. "On nonstationary Stokes problem and Navier-Stokes problem in a half-space with initial data nondecreasing at infinity." In: *Problemy Matematicheskogo Analiza* 25 (2003), pp. 189–210. ISSN: 0132-6511.
- [Sol03b] Vsevolod A. Solonnikov. "On nonstationary Stokes problem and Navier-Stokes problem in a half-space with initial data nondecreasing at infinity." In: *Journal of Mathematical Sciences* 114.5 (2003), pp. 1726–1740.
- [Sol68] Vsevolod A. Solonnikov. "Estimates of the solutions of a nonstationary linearized system of Navier-Stokes equations." In: *Translations. Series 2. American Mathematical Society* 75 (1968), pp. 1–116. ISSN: 0065-9290; 2472-3193/e.
- [Spe71] Anthony J. M. Spencer. "Theory of invariants." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 239–353.
- [Sto45] George G. Stokes. "On the theories of the internal friction of fluids in motion, and of the equilibrium and motion of elastic solids." In: *Transactions of the Cambridge Philosophical Society* 8 (1845), pp. 287–319.
- [Sto51] George G. Stokes. "On the effect of the internal friction of fluids on the motion of pendulums." In: *Transactions of the Cambridge Philosophical Society* 9.2 (1851), pp. 8–106.
- [Sto56] George G. Stokes. "On the dynamical theory of diffraction." In: Transactions of the Cambridge Philosophical Society 9, part I (1856), pp. 1–62.
- [Şuh75] Erdoğan S. Şuhubi. "Constitutive equations for simple materials. Thermoelastic solids." In: Continuum Physics. Ed. by A. Cemal Eringen. Vol. II: Continuum Mechanics of Single-Substance Bodies. New York: Academic Press, 1975, pp. 173–265.

[TG06] Enrique A. Thomann and Ronald B. Guenther. "The fundamental solution of the linearized Navier-Stokes equations for spinning bodies in three spatial dimensions—time dependent case." In: Journal of Mathematical Fluid Mechanics 8.1 (2006), pp. 77–98.

- [Tim60] Reinier Timman. "Linearized theory of unsteady flow of a compressible fluid." In: *Fluid Dynamics III*. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 283–310.
- [TN65] Clifford A. Truesdell III and Walter Noll. *The Non-Linear Field Theories of Mechanics*. Vol. III/3. Encyclopedia of Physics. Berlin: Springer-Verlag, 1965.
- [TR00] Clifford A. Truesdell III and Kumbakonam R. Rajagopal. An Introduction to the Mechanics of Fluids. Boston: Birkhäuser, 2000.
- [Tri83] Hans Triebel. *Theory of Function Spaces*. Vol. 78. Monographs in Mathematics. Boston: Birkhäuser Verlag, 1983.
- [Tru54] Clifford A. Truesdell III. *The Kinematics of Vorticity*. Bloomington, Indiana: Indiana University Press, 1954.
- [Tru66] Clifford A. Truesdell III. The Elements of Continuum Mechanics. Corrected second printing 1985. New York: Springer-Verlag, 1966.
- [Tru91] Clifford A. Truesdell III. A First Course in Rational Continuum Mechanics. Vol. 1. Academic Press, 1991.
- [TT60] Clifford A. Truesdell III and Richard A. Toupin. "The classical field theories." In: *Principles of Classical Mechanics and Field Theory*. Ed. by Siegfried Flügge. Vol. III/1. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 226–793.
- [Wah85] Wolf von Wahl. The Equations of Navier-Stokes and Abstract Parabolic Equations. Vol. E8. Aspects of Mathematics. Braunschweig: Friedr. Vieweg & Son Verlagsgesellschaft mbH, 1985.
- [Wan79a] Chao-Cheng Wang. Mathematical Principles of Mechanics and Electromagnetism. Part A: Analytical and Continuum Mechanics. New York: Plenum Press, 1979.
- [Wan79b] Chao-Cheng Wang. Mathematical Principles of Mechanics and Electromagnetism. Part B: Electromagnetism and Gravitation. New York: Plenum Press, 1979.

[Wat12] Neil A. Watson. Introduction to Heat Potential Theory. Vol. 182. Mathematical Surveys and Monographs. Providence, Rhode Island: American Mathematical Society, 2012.

- [Wei80] Joachim Weidmann. Linear Operators in Hilbert Space. Vol. 68. Graduate Texts in Mathematics. New York: Springer-Verlag, 1980.
- [WL60] John V. Wehausen and Edmund V. Laitone. "Surface waves." In: Fluid Dynamics III. Ed. by Siegfried Flügge. Vol. IX. Encyclopedia of Physics. Berlin: Springer-Verlag, 1960, pp. 446–778.
- [Woo71] Leslie C. Woods. "Analytic function theory." In: *Continuum Physics*. Ed. by A. Cemal Eringen. Vol. 1: Mathematics. New York: Academic Press, 1971, pp. 491–603.
- [Zim90] Robert J. Zimmer. Essential Results of Functional Analysis. Chicago Lectures in Mathematics. Chicago: University of Chicago Press, 1990.