References

[Abd17] A. R. Abdulghany. "Generalization of parallel axis theorem for rotational inertia." In: *American Journal of Physics* 85 (Oct. 2017), pp. 791–795.
DOI: 10.1119/1.4994835.

[ACFL95] E. F. Arias, P. Charlot, M. Feissel, and J.-F. Lestrade. "The extragalactic reference system of the International Earth Rotation Service, ICRS." In: *Astronomy & Astrophysics* 303 (Nov. 1995), pp. 604–608.

[ACM06] I. Alonso-Mallo, B. Cano, and M. J. Moreta. "Stability of Runge–Kutta–Nyström methods." In: *Journal of Computational and Applied Mathematics* 189.1-2 (May 1, 2006), pp. 120–131.
DOI: 10.1016/j.cam.2005.01.005.

[AK15] Z. A. Anastassi and A. A. Kosti. "A 6(4) optimized embedded Runge–Kutta–Nyström pair for the numerical solution of periodic problems." In: *Journal of Computational and Applied Mathematics* 275 (2015), pp. 311–320.
DOI: 10.1016/j.cam.2014.07.016.

[Arc+11] B. A. Archinal, M. F. A'Hearn, E. Bowell, A. Conrad, G. J. Consolmagno, R. Courtin, T. Fukushima, D. Hestroffer, J. L. Hilton, G. A. Krasinsky, G. Neumann, J. Oberst, P. K. Seidelmann, P. Stooke, D. J. Tholen, P. C. Thomas, and I. P. Williams. "Report of the IAU Working Group on Cartographic Coordinates and Rotational Elements: 2009." In: *Celestial Mechanics and Dynamical Astronomy* 109.2 (2011), pp. 101–135.
DOI: 10.1007/s10569-010-9320-4.
eprint: http://goo.gl/d6WdlJ.

[BC72] R. A. Broucke and P. J. Cefola. "On the Equinoctial Orbit Elements." In: *Celestial Mechanics* 5.3 (May 1972), pp. 303–310.
DOI: 10.1007/BF01228432.

[BCM07] S. Blanes, F. Casas, and A. Murua. "Splitting methods for non-autonomous linear systems." In: *International Journal of Computer Mathematics* 84.6 (2007), pp. 713–727.
DOI: 10.1080/00207160701458567.

[BCR00] S. Blanes, F. Casas, and J. Ros. "Processing Symplectic Methods for Near-Integrable Hamiltonian Systems." In: *Celestial Mechanics and Dynamical Astronomy* 77.1 (2000), pp. 17–36.
DOI: 10.1023/A:1008311025472.

[BCR01a] S. Blanes, F. Casas, and J. Ros. "High-order Runge–Kutta–Nyström geometric methods with processing." In: *Applied Numerical Mathematics* 39.3–4 (2001). Themes in Geometric Integration, pp. 245–259.
DOI: 10.1016/S0168-9274(00)00035-0.

[BCR01b] S. Blanes, F. Casas, and J. Ros. "New Families of Symplectic Runge–Kutta–Nyström Integration Methods." In: *Numerical Analysis and Its Applications*. Ed. by L. Vulkov, P. Yalamov, and J. Waśniewski. Vol. 1988. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2001, pp. 102–109.
DOI: 10.1007/3-540-45262-1_13.

[BCR99] S. Blanes, F. Casas, and J. Ros. "Symplectic Integration with Processing: A General Study." In: *SIAM Journal on Scientific Computing* 21.2 (1999), pp. 711–727.
DOI: 10.1137/S1064827598332497.

[Běi13] 北斗卫星导航系统公开服务性能规范(1.0 版)—*BeiDou Navigation Satellite System Open Service Performance Standard (Version 1.0)*. BDS-OS-PS-1.0. Chinese: http://www.beidou.gov.cn/zt/zcfg/201710/P020171202709828404659.pdf—English: http://www.beidou.gov.cn/xt/gfxz/201805/P020180509584193805984.pdf. 中国卫星导航系统管理办公室—China Satellite Navigation Office, Dec. 2013.

[Ben97] J. R. Benada. *PO.DAAC Merged GDR (TOPEX-Poseidon) Generation B User's handbook, version 2.0*. D-11007. Jet Propulsion Laboratory, July 30, 1997.
eprint: https://podaac-tools.jpl.nasa.gov/drive/files/allData/topex/L2/mgdrb/docs/uhmgdrb/html/usr_toc.htm.

[Beu03] H. Beust. "Symplectic integration of hierarchical stellar systems." In: *Astronomy & Astrophysics* 400 (Mar. 2003), pp. 1129–1144.
DOI: 10.1051/0004-6361:20030065.

[BF54] P. F. Byrd and M. D. Friedman. *Handbook of elliptic integrals for engineers and physicists*. Springer-Verlag, 1954.

[Bjö94] Å. Björck. "Numerics of Gram-Schmidt orthogonalization." In: *Linear Algebra and its Applications* 197–198 (1994), pp. 297–316.
DOI: 10.1016/0024-3795(94)90493-6.

[Bla+13] S. Blanes, F. Casas, A. Farrés, J. Laskar, J. Makazaga, and A. Murua. "New families of symplectic splitting methods for numerical integration in dynamical astronomy." In: *Applied Numerical Mathematics* 68 (2013), pp. 58–72.
DOI: 10.1016/j.apnum.2013.01.003.

[BM02] S. Blanes and P. C. Moan. "Practical Symplectic Partitioned Runge–Kutta and Runge–Kutta–Nyström Methods." In: *Journal of Computational and Applied Mathematics* 142.2 (May 2002), pp. 313–330.
DOI: 10.1016/S0377-0427(01)00492-7.

[Bra+14] B. K. Bradley, B. A. Jones, G. Beylkin, K. Sandberg, and P. Axelrad. "Bandlimited implicit Runge–Kutta integration for Astrodynamics." In: *Celestial Mechanics and Dynamical Astronomy* 119.2 (2014), pp. 143–168.
DOI: 10.1007/s10569-014-9551-x.

[Bra06] C. Braak. "A Markov Chain Monte Carlo version of the genetic algorithm Differential Evolution: easy Bayesian computing for real parameter spaces." In: *Statistics and Computing* 16 (Sept. 2006), pp. 239–249.
DOI: 10.1007/s11222-006-8769-1.

[Bre73] R. P. Brent. *Algorithms for minimization without derivatives*. Prentice-Hall, 1973.

[BS96] F. Blanc and C. Schgounn. *AVISO/Altimetry, AVISO User Handbook for Merged TOPEX/-POSEIDON products, Edition 3.0*. AVI-NT-02-101-CN. Centre national d'études spatiales, July 1996.

[BSFL98] R. S. Bhat, B. E. Shapiro, R. B. Frauenholz, and R. K. Leavitt. *TOPEX/Poseidon Orbit Maintenance for First Five Years*. Technical Report 97-1398. Jet Propulsion Laboratory, May 11, 1998.
eprint: https://trs.jpl.nasa.gov/handle/2014/22860.

[Bul65] R. Bulirsch. "Numerical Calculation of Elliptic Integrals and Elliptic Functions." In: *Numerische Mathematik* 7.1 (Feb. 1, 1965), pp. 78–90.
DOI: 10.1007/BF01397975.

[Bul69] R. Bulirsch. "Numerical Calculation of Elliptic Integrals and Elliptic Functions. III." In: *Numerische Mathematik* 13.4 (Aug. 1969), pp. 305–315.
DOI: 10.1007/BF02165405.

[Cap12] M. Capderou. *Satellites : de Kepler au GPS*. Springer-Verlag France, 2012.

[CFSZ07] E. Celledoni, F. Fassò, N. Säfström, and A. Zanna. "The exact computation of the free rigid body motion and its use in splitting methods." Preprint at https://www.math.unipd.it/~fasso/research/papers/norway.pdf. Oct. 2007.

[CFSZ08] E. Celledoni, F. Fassò, N. Säfström, and A. Zanna. "The exact computation of the free rigid body motion and its use in splitting methods." In: *SIAM J. Scientific Computing* 30 (May 2008), pp. 2084–2112.

[CGM08] M. P. Calvo, S. González-Pinto, and J. I. Montijano. "Global error estimation based on the tolerance proportionality for some adaptive Runge–Kutta codes." In: *Journal of Computational and Applied Mathematics* 218.2 (2008). The Proceedings of the Twelfth International Congress on Computational and Applied Mathematics, pp. 329–341.
DOI: 10.1016/j.cam.2007.02.034.

[Cha73] J. F. Chandler. "Determination of the Dynamical Properties of the Jovian System by Numerical Analysis." PhD thesis. Massachusetts Institute of Technology, 1973.
eprint: http://hdl.handle.net/1721.1/51410.

[Cha95] J. Chapront. "Representation of planetary ephemerides by frequency analysis. Applications to the five outer planets." In: *Astronomy & Astrophysics – Supplement Series* 109 (Jan. 1995), pp. 181–192.

[Chi97] S. A. Chin. "Symplectic integrators from composite operator factorizations." In: *Physics Letters A* 226.6 (1997), pp. 344–348.
DOI: 10.1016/S0375-9601(97)00003-0.

[CHMR96] M. P. Calvo, D. J. Higham, J. I. Montijano, and L. Rández. "Global error estimation with adaptive explicit Runge–Kutta methods." In: *IMA Journal of Numerical Analysis* 16.1 (1996), pp. 47–63.
DOI: 10.1093/imanum/16.1.47.

[CHO73] C. J. Cohen, E. C. Hubbard, and C. Oesterwinter. *Astronomical Papers Prepared for the Use of the American Ephemeris and Nautical Almanac – Elements of the Outer Planets for One Million Years*. Vol. XXII. I. United States Government Printing Office, 1973.

[CK00] S. A. Chin and D. W. Kidwell. "Higher-order force gradient symplectic algorithms." In: *Physical Review E* 62 (Dec. 2000), p. 8746.
DOI: 10.1103/PhysRevE.62.8746.
eprint: http://arxiv.org/abs/physics/0006082.

[CR91] J. Candy and W. Rozmus. "A symplectic integration algorithm for separable Hamiltonian functions." In: *Journal of Computational Physics* 92.1 (Jan. 1991), pp. 230–256.
DOI: 10.1016/0021-9991(91)90299-Z.

[CS93a] M. P. Calvo and J. M. Sanz-Serna. "High-Order Symplectic Runge–Kutta–Nyström Methods." In: *SIAM Journal on Scientific Computing* 14.5 (1993), pp. 1237–1252.
DOI: 10.1137/0914073.

[CS93b] M. P. Calvo and J. M. Sanz-Serna. "The Development of Variable-step Symplectic Integrators with Application to the Two-body Problem." In: *SIAM Journal on Scientific Computing* 14.4 (July 1993), pp. 936–952.
DOI: 10.1137/0914057.

[CV84] J. Chapront and D. T. Vu. "A new compact representation of ephemerides: application to the motion of Pluto, the Sun and the Galilean satellites of Jupiter." In: *Astronomy & Astrophysics* 141 (1984), pp. 131–143.

[Del90] J.-B. Delambre. "De l'usage du calcul différentiel dans la construction des tables astronomiques." In: *Mémoires présentés à l'Académie*. Vol. V. Mémoires de l'Académie Royale des Sciences de Turin. 1790, pp. 143–180.

[DEP87a] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. "Families of Runge–Kutta–Nyström Formulae." In: *IMA Journal of Numerical Analysis* 7.2 (1987), pp. 235–250.
DOI: 10.1093/imanum/7.2.235.

[DEP87b] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. "High-Order Embedded Runge–Kutta–Nyström Formulae." In: *IMA Journal of Numerical Analysis* 7.4 (1987), pp. 423–430.
DOI: 10.1093/imanum/7.4.423.

[DL42] G. C. Danielson and C. Lánczos. "Some improvements in practical Fourier analysis and their application to x-ray scattering from liquids." In: *Journal of the Franklin Institute* 233.4 (1942), pp. 365–380.
DOI: 10.1016/S0016-0032(42)90767-1.

[DM11] F. Diele and C. Marangi. "Explicit symplectic partitioned Runge–Kutta–Nyström methods for non-autonomous dynamics." In: *Applied Numerical Mathematics* 61.7 (2011), pp. 832–843.
DOI: 10.1016/j.apnum.2011.02.003.

[Dor96] J. R. Dormand. *Numerical Methods for Differential Equations – A Computational Approach*. CRC Press, 1996.

[Eme07] V. V. Emel'yanenko. "A method of symplectic integrations with adaptive time-steps for individual Hamiltonians in the planetary N-body problem." In: *Celestial Mechanics and Dynamical Astronomy* 98.3 (2007), pp. 191–202.
DOI: 10.1007/s10569-007-9077-6.

[ER03] M. El-Mikkawy and E. D. Rahmo. "A new optimized non-FSAL embedded Runge–Kutta–Nyström algorithm of orders 6 and 4 in six stages." In: *Applied Mathematics and Computation* 145.1 (2003), pp. 33–43.
DOI: 10.1016/S0096-3003(02)00436-8.

[Eve85] E. Everhart. "An Efficient Integrator that Uses Gauss-Radau Spacings." In: *Dynamics of Comets: Their Origin and Evolution*. Ed. by A. Carusi and G. B. Valsecchi. Vol. 115. Astrophysics and Space Science Library. Springer Netherlands, 1985, pp. 185–202.
DOI: 10.1007/978-94-009-5400-7_17.

[Far+13] A. Farrés, J. Laskar, S. Blanes, F. Casas, J. Makazaga, and A. Murua. "High precision symplectic integrators for the Solar System." In: *Celestial Mechanics and Dynamical Astronomy* 116.2 (2013), pp. 141–174.
DOI: 10.1007/s10569-013-9479-6.

[Fin87] J. M. Fine. "Low order practical Runge–Kutta–Nyström methods." In: *Computing* 38.4 (1987), pp. 281–297.
DOI: 10.1007/BF02278707.

[FMLG08] A. Fienga, H. Manche, J. Laskar, and M. Gastineau. "INPOP06: a new numerical planetary ephemeris." In: *Astronomy & Astrophysics* 477.1 (2008), pp. 315–327.
DOI: 10.1051/0004-6361:20066607.

[Fol+14] W. M. Folkner, J. G. Williams, D. H. Boggs, R. S. Park, and P. Kuchynka. "The Planetary and Lunar Ephemerides DE430 and DE431." In: *Interplanetary Network Progress Report* 42.196 (2014).
eprint: http://ilrs.gsfc.nasa.gov/docs/2014/196C.pdf.

[FR90] E. Forest and R. D. Ruth. "Fourth-order symplectic integration." In: *Physica D: Nonlinear Phenomena* 43.1 (May 1990), pp. 105–117.
DOI: 10.1016/0167-2789(90)90019-L.

[Fuk09a] T. Fukushima. "Fast computation of complete elliptic integrals and Jacobian elliptic functions." In: *Celestial Mechanics and Dynamical Astronomy* 105.4 (Oct. 25, 2009), pp. 305–328.
DOI: 10.1007/s10569-009-9228-z.

[Fuk09b] T. Fukushima. "Fast computation of Jacobian elliptic functions and incomplete elliptic integrals for constant values of elliptic parameter and elliptic characteristic." In: *Celestial Mechanics and Dynamical Astronomy* 105.1 (Oct. 2009), pp. 245–260.
DOI: 10.1007/s10569-008-9177-y.

[Fuk11a] T. Fukushima. "Precise and fast computation of the general complete elliptic integral of the second kind." In: *Mathematics of Computation* 80 (Feb. 2011), pp. 1725–1743.
DOI: 10.1090/S0025-5718-2011-02455-5.

[Fuk11b] T. Fukushima. "Precise and fast computation of a general incomplete elliptic integral of second kind by half and double argument transformations." In: *Journal of Computational and Applied Mathematics* 235.14 (May 2011), pp. 4140–4148.
DOI: 10.1016/j.cam.2011.03.004.

[Fuk12a] T. Fukushima. *xgscd.txt (Fortran program package to compute the Jacobian elliptic functions, sn(u|m), cn(u|m), dn(u|m))*. Dec. 2012.

[Fuk12b] T. Fukushima. "Precise and fast computation of a general incomplete elliptic integral of third kind by half and double argument transformations." In: *Journal of Computational and Applied Mathematics* 236.7 (Jan. 2012), pp. 1961–1975.
DOI: 10.1016/j.cam.2011.11.007.

[Fuk18] T. Fukushima. *xelbdj.txt: Fortran test driver for "elbdj"/"relbdj", subroutines to compute the double/single precision general incomplete elliptic integrals of all three kinds*. Software. Jan. 2018.
DOI: 10.13140/RG.2.2.11113.80489.

[Gen72a] W. M. Gentleman. "Algorithm 424: Clenshaw-Curtis quadrature [D1]." In: *Communications of the ACM* 15.5 (May 1972), pp. 353–355.
DOI: 10.1145/355602.355603.

[Gen72b] W. M. Gentleman. "Implementing Clenshaw-Curtis quadrature, I methodology and experience." In: *Communications of the ACM* 15.5 (May 1972), pp. 337–342.
DOI: 10.1145/355602.361310.

[Gen72c] W. M. Gentleman. "Implementing Clenshaw-Curtis quadrature, II computing the cosine transformation." In: *Communications of the ACM* 15.5 (May 1972), pp. 343–346. DOI: 10.1145/355602.361311.

[GMPS16] K. Goździewski, C. Migaszewski, F. Panichi, and E. Szuszkiewicz. "The Laplace resonance in the Kepler-60 planetary system." In: *Monthly Notices of the Royal Astronomical Society: Letters* 455.1 (Jan. 1, 2016), pp. L104–L108. DOI: 10.1093/mnrasl/slv156.

[GV13] G. H. Golub and C. F. Van Loan. *Matrix Computations (4th Edition)*. Johns Hopkins University Press, Feb. 15, 2013.

[Hig02] N. J. Higham. *Accuracy and Stability of Numerical Algorithms*. Society for Industrial and Applied Mathematics, 2002.

[HLB08] Y. Hida, X. S. Li, and D. H. Bailey. "Library for Double-Double and Quad-Double Arithmetic." Preprint at https://www.davidhbailey.com/dhbpapers/qd.pdf. May 8, 2008.

[HLW03] E. Hairer, C. Lubich, and G. Wanner. "Geometric numerical integration illustrated by the Störmer–Verlet method." In: *Acta Numerica* (May 2003), pp. 399–450. DOI: 10.1017/S0962492902000144.

[HMR08] E. Hairer, R. I. McLachlan, and A. Razakarivony. "Achieving Brouwer's law with implicit Runge–Kutta methods." In: *BIT Numerical Mathematics* 48.2 (2008), pp. 231–243. DOI: 10.1007/s10543-008-0170-3.

[HMS09] E. Hairer, R. I. McLachlan, and R. D. Skeel. "On energy conservation of the simplified Takahashi–Imada method." In: *Mathematical Modelling and Numerical Analysis* 43.4 (2009). ID: unige:5211, pp. 631–644.

[HO09] D. Huybrechs and S. Olver. "Highly oscillatory quadrature." In: *Highly Oscillatory Problems*. Ed. by B. Engquist, A. Fokas, and E. Hairer. Cambridge University Press, 2009, pp. 25–50. DOI: 10.1017/CBO9781139107136.

[HS05] E. Hairer and G. Söderlind. "Explicit, Time Reversible, Adaptive Step Size Control." In: *SIAM Journal on Scientific Computing* 26.6 (2005), pp. 1838–1851. DOI: 10.1137/040606995.

[INO06] A. Iserles, S. Nørsett, and S. Olver. "Highly Oscillatory Quadrature: The Story so Far." In: *Numerical Mathematics and Advanced Applications*. Ed. by A. de Castro, D. Gómez, P. Quintela, and P. Salgado. Springer Berlin Heidelberg, 2006, pp. 97–118. DOI: 10.1007/978-3-540-34288-5_6.

[JA12] B. A. Jones and R. L. Anderson. "A Survey of Symplectic and Collocation Integration Methods for Orbit Propagation." In: *AAS/AIAA Spaceflight Mechanics Meeting*. Vol. 143. Advances in the Astronautical Sciences. 2012.

[JE33] E. Jahnke and F. Emde. *Funktionentafeln mit Formeln und Kurven—Tables of functions with formulæ and curves*. Teubner, 1933.

[JE38] E. Jahnke and F. Emde. *Funktionentafeln mit Formeln und Kurven—Tables of functions with formulæ and curves*. Teubner, 1938.

[JEL60] E. Jahnke, F. Emde, and F. Lösch. *Tafeln Höherer Funktionen—Tables of higher functions*. Teubner, 1960.

[Jon12] B. Jones. "Orbit Propagation Using Gauss-Legendre Collocation." In: *AIAA/AAS Astrodynamics Specialist Conference*. Guidance, Navigation, and Control and Co-located Conferences. 2012.

[Kah06] W. Kahan. "How Futile are Mindless Assessments of Roundoff in Floating-Point Computation ?" Rant at https://people.eecs.berkeley.edu/~wkahan/Mindless.pdf. Jan. 11, 2006.

[KM13] A. Krishnamoorthy and D. Menon. "Matrix Inversion Using Cholesky Decomposition." In: *Signal Processing: Algorithms, Architectures, Arrangements, and Applications*. 2013, pp. 70–72.

[Kud07] S. Kudryavtsev. "Long-term harmonic development of lunar ephemeris." In: *Astronomy & Astrophysics* 471 (2007), pp. 1069–1075. DOI: 10.1051/0004-6361:20077568.

[LDV04] V. Lainey, L. Duriez, and A. Vienne. "New accurate ephemerides for the Galilean satellites of Jupiter." In: *Astronomy & Astrophysics* 420.3 (2004), pp. 1171–1183.
DOI: 10.1051/0004-6361:20034565.

[Lea86] W. M. Lear. *The Gravitational Acceleration Equations*. Internal Note 86-FM-15. NASA Johnson Space Center, Apr. 1986.

[Lea87] W. M. Lear. *The Programs TRAJ1 and TRAJ2*. Internal Note 87-FM-4. NASA Johnson Space Center, Apr. 1987.

[Lin81] S. Linnainmaa. "Software for Doubled-Precision Floating-Point Computations." In: *ACM Transactions on Mathematical Software* 7.3 (Sept. 1981), pp. 272–283.
DOI: 10.1145/355958.355960.

[LJVF89] A. C. Long, J. J. O. Cappellari, C. E. Velez, and A. J. Fuchs. *Goddard Trajectory Determination System (GTDS) Mathematical Theory Revision 1*. Tech. rep. FDD/552-89/001 CSC/TR-89/6001. Computer Sciences Corporation, National Aeronautics, and Space Administration/Goddard Space Flight Center, July 1989.

[LLL12] 李松明, 李岩, and 李劲东. "“天绘一号”传输型摄影测量与遥感卫星—Mapping Satellite-1 transmission type photogrammetric and remote sensing satellite." In: 遥感学报—*Journal of Remote Sensing* 16.S1 (2012), pp. 10–16.
DOI: 10.11834/jrs.20120003.
CNKI: YGXB2012S1005.

[MA92] R. I. McLachlan and P. Atela. "The Accuracy of Symplectic Integrators." In: *Nonlinearity* 5 (1992), pp. 541–562.
DOI: 10.1088/0951-7715/5/2/011.

[McL02] R. I. McLachlan. "Families of High-Order Composition Methods." In: *Numerical Algorithms* 31.1-4 (2002), pp. 233–246.
DOI: 10.1023/A:1021195019574.

[McL07] R. I. McLachlan. "A New Implementation of Symplectic Runge–Kutta Methods." In: *SIAM Journal on Scientific Computing* 29.4 (2007), pp. 1637–1649.
DOI: 10.1137/06065338X.

[McL93] R. I. McLachlan. "Symplectic integration of Hamiltonian wave equations." In: *Numerische Mathematik* 66.1 (1993), pp. 465–492.
DOI: 10.1007/BF01385708.

[McL95] R. I. McLachlan. "On the Numerical Integration of Ordinary Differential Equations by Symmetric Composition Methods." In: *SIAM Journal on Scientific Computing* 16.1 (Jan. 1995), pp. 151–168.
DOI: 10.1137/0916010.

[Mon92] O. Montenbruck. "Numerical integration methods for orbital motion." In: *Celestial Mechanics and Dynamical Astronomy* 53.1 (1992), pp. 59–69.
DOI: 10.1007/BF00049361.

[MQ02] R. I. McLachlan and G. R. W. Quispel. "Splitting methods." In: *Acta Numerica* 11 (Jan. 2002), pp. 341–434.
DOI: 10.1017/S0962492902000053.

[MQ06] R. I. Mclachlan and G. R. W. Quispel. "Geometric Integrators for ODEs." In: *Journal of Physics A* 39 (2006), pp. 5251–5285.
DOI: 10.1088/0305-4470/39/19/S01.

[Mur98] A. Murua. "Runge-Kutta-Nyström methods for general second order ODEs with application to multi-body systems." In: *Applied Numerical Mathematics* 28.2-4 (Oct. 1998), pp. 387–399.
DOI: 10.1016/S0168-9274(98)00055-5.

[Myr07] V. Myrnyy. "A Simple and Efficient FFT Implementation in C++." In: *Dr. Dobb's* (2007).
eprint: https://drdobbs.com/cpp/a-simple-and-efficient-fft-implementatio/199500857.

[New87] I. Newton. *Philosophiæ naturalis principia mathematica*. Facsimile at https://cudl.lib.cam.ac.uk/view/PR-ADV-B-00039-00001/1. Jussu Societatis Regiæ ac Typis Joseph Streater, 1687.

[New89] X. X. Newhall. "Numerical Representation of Planetary Ephemerides." In: *Celestial Mechanics* 45 (1989), pp. 305–310.
eprint: http://adsabs.harvard.edu/full/1989CeMec..45..305N.

[OLBC10] F. Olver, D. Lozier, R. Boisvert, and C. Clark. *NIST Handbook of Mathematical Functions*. Cambridge University Press, 2010.

[OS94] D. I. Okunbor and R. D. Skeel. "Canonical Runge–Kutta–Nyström methods of orders five and six." In: *Journal of Computational and Applied Mathematics* 51.3 (1994), pp. 375–382.
DOI: 10.1016/0377-0427(92)00119-T.

[Ove65] K. J. Overholt. "An Instability in the Fibonacci and Golden Section Search Methods." In: *BIT* 5.4 (1965). Merged with the preceding article (starting p. 282) on the journal website, pp. 284–286.
DOI: 10.1007/BF01937508.

[PL10] G. Petit and B. Luzum. *IERS Conventions (2010)*. IERS Technical Note 36. International Earth Rotation and Reference Systems Service Convention Centre, 2010.
eprint: http://www.iers.org/IERS/EN/Publications/TechnicalNotes/tn36.html.

[PR14] E. Pellegrini and R. P. Russell. "F and G Taylor Series Solutions to the Circular Restricted Three Body Problem." In: *AAS/AIAA Spaceflight Mechanics Meeting*. Vol. 152. Advances in the Astronautical Sciences. 2014.

[QT90] G. D. Quinlan and S. Tremaine. "Symmetric multistep methods for the numerical integration of planetary orbits." In: *Astronomical Journal* 100 (Nov. 1990), pp. 1694–1700.

[Qui99] G. D. Quinlan. "Resonances and instabilities in symmetric multistep methods." Preprint at https://arxiv.org/pdf/astro-ph/9901136.pdf. Jan. 12, 1999.

[QZJ08] 曲宏松, 张叶, and 金光. "基于 Q 值选取的太阳同步回归轨道设计算法—Repeat sun-synchronous orbit design method based on Q value selection." In: 光学精密工程—*Optics and Precision Engineering* 16.9 (Sept. 2008), pp. 1688–1694.
CNKI: GXJM200809026.

[Rie+16] J. Ries, S. Bettadpur, R. Eanes, Z. Kang, U. Ko, C. McCullough, P. Nagel, N. Pie, S. Poole, H. Save, and B. Tapley. *The Combination Global Gravity Model GGM05C*. Technical Memorandum CSR-TM-16-01. Center for Space Research at the University of Texas at Austin, Jan. 2016.
eprint: ftp://ftp.csr.utexas.edu/pub/grace/GGM05/README_GGM05C.pdf.

[RL06] R. P. Russell and M. Lara. "Repeat Ground Track Lunar Orbits in the Full-Potential Plus Third-Body Problem." In: *AIAA/AAS Astrodynamics Specialist Conference*. Vol. 3. Collection of Technical Papers. Aug. 2006.
DOI: 10.2514/6.2006-6750.

[Rut83] R. Ruth. "A Canonical Integration Technique." In: *Proceedings of the 1983 Particle Accelerator Conference (PAC 83)*. Vol. 30. IEEE Transactions on Nuclear Science. https://accelconf.web.cern.ch/accelconf/p83/PDF/PAC1983_2669.PDF. May 1, 1983, pp. 2669–2671.

[Sat69] Saturn V Flight Evaluation Working Group. *Saturn V Launch Vehicle, Flight Evaluation Report AS–503, Apollo 8 Mission*. Tech. rep. MPR-SAT-FE-69-1. George C. Marshall Space Flight Center, Feb. 1969.
eprint: http://hdl.handle.net/2060/19690015314.

[SM10] J. R. Scott and M. C. Martini. "High-Speed Solution of Spacecraft Trajectory Problems Using Taylor Series Integration." In: *Journal of Spacecraft and Rockets* 47.1 (2010), pp. 199–202.

[Smi61] O. K. Smith. "Eigenvalues of a Symmetric 3 × 3 Matrix." In: *Communications of the ACM* 4.4 (Apr. 1961), p. 168.
DOI: 10.1145/355578.366316.

[SN97] M. Sidlichovsky and D. Nesvorny. "Frequency modified Fourier transform and its application to asteroids." In: *Celestial Mechanics and Dynamical Astronomy* 65 (1997), pp. 137–148.

[Som93] B. P. Sommeijer. "Explicit, high-order Runge–Kutta–Nyström methods for parallel computers." In: *Applied Numerical Mathematics* 13.1–3 (1993), pp. 221–240.
DOI: 10.1016/0168-9274(93)90145-H.

[SQG13] P. W. Sharp, M. A. Qureshi, and K. R. Grazier. "High order explicit Runge–Kutta Nyström pairs." In: *Numerical Algorithms* 62.1 (2013), pp. 133–148.
DOI: 10.1007/s11075-012-9571-0.

[SSo02] M. Sofroniou and G. Spaletta. "Symplectic Methods for Separable Hamiltonian Systems." In: *Computational Science — ICCS 2002*. Ed. by P. M. A. Sloot, A. G. Hoekstra, C. J. K. Tan, and J. J. Dongarra. Vol. 2331. Lecture Notes in Computer Science. Springer, Berlin, Heidelberg, Apr. 10, 2002, pp. 506–515.
DOI: 10.1007/3-540-47789-6_53.

[Sta98] E. M. Standish. *JPL Planetary and Lunar Ephemerides, DE405/LE405*. Interoffice Memorandum IOM 312.F–98–048. Jet Propulsion Laboratory, Aug. 1998.

[Stö12] C. Störmer. "Sur les trajectoires des corpuscules électrisés dans l'espace sous l'action du magnétisme terrestre, avec application aux aurores boréales." In: *Radium* 9.11 (Nov. 1912), pp. 395–399.
DOI: 10.1051/radium:01912009011039501.

[Suz90] M. Suzuki. "Fractal decomposition of exponential operators with applications to many-body theories and Monte Carlo simulations." In: *Physics Letters A* 146 (June 1990), pp. 319–323.
DOI: 10.1016/0375-9601(90)90962-N.

[Tao12] T. Tao. *A mathematical formalisation of dimensional analysis*. Blog post. University of California, Los Angeles, Dec. 29, 2012.
eprint: https://terrytao.wordpress.com/2012/12/29/a-mathematical-formalisation-of-dimensional-analysis/.

[TBS13] Y. Takahashi, M. W. Busch, and D. J. Scheeres. "Spin state and moment of inertia characterization of 4179 Toutatis." In: *The Astronomical Journal* 146.4 (Sept. 2013), pp. 95–104.
DOI: 10.1088/0004-6256/146/4/95.

[Tre10] L. N. Trefethen. "Householder triangularization of a quasimatrix." In: *IMA Journal of Numerical Analysis* 30.4 (2010), pp. 887–897.
DOI: 10.1093/imanum/drp018.

[Ver67] L. Verlet. "Computer "Experiments" on Classical Fluids. I. Thermodynamical Properties of Lennard-Jones Molecules." In: *Physical Review* 159.1 (July 5, 1967), pp. 98–103.
DOI: 10.1103/PhysRev.159.98.

[Wal18] U. Walter. *Astronautics – The Physics of Space Flight – Third Edition*. Springer Nature Switzerland AG, 2018.
DOI: 10.1007/978-3-319-74373-8.

[War03] H. S. Warren Jr. *Hacker's Delight*. Addison-Wesley, 2003.

[Wes17] D. B. Westra. *Identites and properties for associated Legendre functions*. Personal note. Universität Wien, Sept. 2017.
eprint: https://www.mat.univie.ac.at/~westra/associatedlegendrefunctions.pdf.

[WG13] G. Wilkins and M. Gu. "A modified Brent's method for finding zeros of functions." In: *Numerische Mathematik* 123 (2013), pp. 177–188.
DOI: 10.1007/s00211-012-0480-x.

[WL17] 汪海洪 and 罗北. "计算测高卫星地面轨迹交叉点的快速数值算法—Fast Numerical Algorithm for the Calculation of Altimetric Crossovers from Satellite Ground Tracks." In: 武汉大学学报・信息科学版—*Geomatics and Information Science of Wuhan University* 42.3 (Mar. 2017), pp. 293–298.
DOI: 10.13203/j.whugis20140866.
CNKI: WHCH201703002.

[XZL09] 徐莹, 张有广, and 林明森. “卫星高度计轨道设计的因素分析—An Analysis on the Considerations of Satellite Altimeter Orbit Design.” In: 遥感技术与应用—*Remote Sensing Technology and Application* 24.2 (2009), pp. 155–163.
DOI: 10.11873/j.issn.1004-0323.2009.2.155.
CNKI: YGJS200902005.

[Yos90] H. Yoshida. “Construction of higher order symplectic integrators.” In: *Physics Letters A* 150.5–7 (1990), pp. 262–268.
DOI: 10.1016/0375-9601(90)90092-3.

[Zha+15] Y. Zhao, J. Ji, J. Huang, S. Hu, X. Hou, Y. Li, and W.-H. Ip. “Orientation and rotational parameters of asteroid 4179 Toutatis: new insights from Chang’e-2’s close flyby.” In: *Monthly Notices of the Royal Astronomical Society* 450.4 (May 2015), pp. 3620–3632.
DOI: 10.1093/mnras/stv792.

[Zhō+12] 周飞, 李强, 信太林, 韦锡峰, and 张华. “空间辐射环境引起在轨卫星故障分析与加固对策—Analyses and countermeasures of in-orbit satellite failures caused by space radiation environment.” In: 航天器环境工程—*Spacecraft Environment Engineering* 29.4 (2012), pp. 392–396.
DOI: 10.3969/j.issn.1673-1379.2012.04.006.
CNKI: HTHJ201204009.