

MY PUBLICATIONS

ADRI B OLDE DAALHUIS

REFERENCES

- [1] G. NEMES AND A. B. OLDE DAALHUIS, *Large-Parameter Asymptotic Expansions for the Legendre and Allied Functions*, SIAM J. Math. Anal., 52 (2020), pp. 437–470, <https://doi.org/10.1137/19M1262498>.
- [2] G. NEMES AND A. B. OLDE DAALHUIS, *Asymptotic expansions for the incomplete gamma function in the transition regions*, Math. Comp., 88 (2019), pp. 1805–1827, <https://doi.org/10.1090/mcom/3391>.
- [3] R. E. GAUNT, S. IYENGAR, A. B. OLDE DAALHUIS, AND B. SIMSEK, *An asymptotic expansion for the normalizing constant of the Conway–Maxwell–Poisson distribution*, Annals of the Institute of Statistical Mathematics, 71 (2019), pp. 163–180, <https://doi.org/10.1007/s10463-017-0629-6>.
- [4] T. BENNETT, C. J. HOWLS, G. NEMES, AND A. B. OLDE DAALHUIS, *Globally Exact Asymptotics for Integrals with Arbitrary Order Saddles*, SIAM J. Math. Anal., 50 (2018), pp. 2144–2177, <https://doi.org/10.1137/17M1154217>.
- [5] S. F. KHWAJA AND A. B. OLDE DAALHUIS, *Computation of the coefficients appearing in the uniform asymptotic expansions of integrals*, Stud. Appl. Math., 139 (2017), pp. 551–567, <https://arxiv.org/pdf/1610.04472.pdf>.
- [6] N. HAUG, A. OLDE DAALHUIS, AND T. PRELLBERG, *Higher-order Airy scaling in deformed Dyck paths*, J. Stat. Phys., 166 (2017), pp. 1193–1208, <https://doi.org/10.1007/s10955-016-1708-4>.
- [7] G. NEMES AND A. B. OLDE DAALHUIS, *Uniform asymptotic expansion for the incomplete beta function*, SIGMA Symmetry Integrability Geom. Methods Appl., 12 (2016), pp. Paper No. 101, 5, <https://doi.org/10.3842/SIGMA.2016.101>.
- [8] K. OGILVIE AND A. B. OLDE DAALHUIS, *Rigorous asymptotics for the Lamé and Mathieu functions and their respective eigenvalues with a large parameter*, SIGMA Symmetry Integrability Geom. Methods Appl., 11 (2015), pp. Paper 095, 31, <https://doi.org/10.3842/SIGMA.2015.095>.
- [9] S. FARID KHWAJA AND A. B. OLDE DAALHUIS, *Uniform asymptotic expansions for hypergeometric functions with large parameters IV*, Anal. Appl. (Singap.), 12 (2014), pp. 667–710, <https://doi.org/10.1142/S0219530514500389>.
- [10] S. F. KHWAJA AND A. B. OLDE DAALHUIS, *Exponentially accurate uniform asymptotic approximations for integrals and Bleistein’s method revisited*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci., 469 (2013), pp. 20130008, 12, <https://doi.org/10.1098/rspa.2013.0008>.
- [11] S. F. KHWAJA AND A. B. OLDE DAALHUIS, *Uniform asymptotic approximations for the Meixner–Sobolev polynomials*, Anal. Appl. (Singap.), 10 (2012), pp. 345–361, <https://doi.org/10.1142/S0219530512500169>.
- [12] C. J. HOWLS AND A. B. OLDE DAALHUIS, *Exponentially accurate solution tracking for nonlinear ODEs, the higher order Stokes phenomenon and double transseries resummation*, Nonlinearity, 25 (2012), pp. 1559–1584, <https://doi.org/10.1088/0951-7715/25/6/1559>.
- [13] R. A. ASKEY AND A. B. OLDE DAALHUIS, *Generalized hypergeometric functions and Meijer G-function*, in NIST handbook of mathematical functions, U.S. Dept. Commerce, Washington, DC, 2010, pp. 403–418, <https://dlmf.nist.gov/16>.
- [14] A. B. OLDE DAALHUIS, *Hypergeometric function*, in NIST handbook of mathematical functions, U.S. Dept. Commerce, Washington, DC, 2010, pp. 383–401, <https://dlmf.nist.gov/15>.
- [15] A. B. OLDE DAALHUIS, *Confluent hypergeometric functions*, in NIST handbook of mathematical functions, U.S. Dept. Commerce, Washington, DC, 2010, pp. 321–349, <https://dlmf.nist.gov/13>.
- [16] A. B. OLDE DAALHUIS, *Uniform asymptotic expansions for hypergeometric functions with large parameters. III*, Anal. Appl. (Singap.), 8 (2010), pp. 199–210, <https://doi.org/10.1142/S0219530510001588>.
- [17] E. A. BENDER, A. B. OLDE DAALHUIS, Z. GAO, L. B. RICHMOND, AND N. WORMALD, *Asymptotics of some convolutional recurrences*, Electron. J. Combin., 17 (2010), pp. Research Paper 1, 11, http://www.combinatorics.org/Volume_17/Abstracts/v17i1r1.html.

- [18] A. B. OLDE DAALHUIS, *Hyperasymptotics and hyperterminants: exceptional cases*, J. Comput. Appl. Math., 233 (2009), pp. 555–563, <https://doi.org/10.1016/j.cam.2009.08.005>.
- [19] A. B. OLDE DAALHUIS, *On the computation of parameter derivatives of solutions of linear difference equations*, J. Comput. Appl. Math., 230 (2009), pp. 128–134, <https://doi.org/10.1016/j.cam.2008.10.068>.
- [20] A. B. OLDE DAALHUIS, *Mixed Gevrey asymptotics*, Anal. Appl. (Singap.), 6 (2008), pp. 151–168, <https://doi.org/10.1142/S0219530508001109>.
- [21] E. I. ÓLAFSDÓTTIR, A. B. OLDE DAALHUIS, AND J. VANNESTE, *Inertia-gravity-wave radiation by a sheared vortex*, J. Fluid Mech., 596 (2008), pp. 169–189, <https://doi.org/10.1017/S0022112007009408>.
- [22] S. J. CHAPMAN, C. J. HOWLS, J. R. KING, AND A. B. OLDE DAALHUIS, *Why is a shock not a caustic? The higher-order Stokes phenomenon and smoothed shock formation*, Nonlinearity, 20 (2007), pp. 2425–2452, <https://doi.org/10.1088/0951-7715/20/10/009>.
- [23] A. B. OLDE DAALHUIS, *Hyperasymptotics for nonlinear ODEs. I. A Riccati equation*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci., 461 (2005), pp. 2503–2520, <https://doi.org/10.1098/rspa.2005.1462>.
- [24] E. I. ÓLAFSDÓTTIR, A. B. OLDE DAALHUIS, AND J. VANNESTE, *Stokes-multiplier expansion in an inhomogeneous differential equation with a small parameter*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci., 461 (2005), pp. 2243–2256, <https://doi.org/10.1098/rspa.2005.1479>.
- [25] A. B. OLDE DAALHUIS, *Hyperasymptotics for nonlinear ODEs. II. The first Painlevé equation and a second-order Riccati equation*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci., 461 (2005), pp. 3005–3021, <https://doi.org/10.1098/rspa.2005.1463>.
- [26] A. B. OLDE DAALHUIS, *Inverse factorial-series solutions of difference equations*, Proc. Edinb. Math. Soc. (2), 47 (2004), pp. 421–448, <https://doi.org/10.1017/S0013091503000609>.
- [27] C. J. HOWLS, P. J. LANGMAN, AND A. B. OLDE DAALHUIS, *On the higher-order Stokes phenomenon*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci., 460 (2004), pp. 2285–2303, <https://doi.org/10.1098/rspa.2004.1299>.
- [28] A. B. OLDE DAALHUIS, *On higher-order Stokes phenomena of an inhomogeneous linear ordinary differential equation*, J. Comput. Appl. Math., 169 (2004), pp. 235–246, <https://doi.org/10.1016/j.cam.2003.12.023>.
- [29] A. B. OLDE DAALHUIS, *Exponential asymptotics*, in Orthogonal polynomials and special functions (Leuven, 2002), vol. 1817 of Lecture Notes in Math., Springer, Berlin, 2003, pp. 211–244, https://doi.org/10.1007/3-540-44945-0_6.
- [30] C. J. HOWLS AND A. B. OLDE DAALHUIS, *Hyperasymptotic solutions of inhomogeneous linear differential equations with a singularity of rank one*, R. Soc. Lond. Proc. Ser. A Math. Phys. Eng. Sci., 459 (2003), pp. 2599–2612, <https://doi.org/10.1098/rspa.2003.1149>.
- [31] A. B. OLDE DAALHUIS, *Uniform asymptotic expansions for hypergeometric functions with large parameters. II*, Anal. Appl. (Singap.), 1 (2003), pp. 121–128, <https://doi.org/10.1142/S021953050300003X>.
- [32] A. B. OLDE DAALHUIS, *Uniform asymptotic expansions for hypergeometric functions with large parameters. I*, Anal. Appl. (Singap.), 1 (2003), pp. 111–120, <https://doi.org/10.1142/S0219530503000028>.
- [33] A. B. OLDE DAALHUIS, *On the asymptotics for late coefficients in uniform asymptotic expansions of integrals with coalescing saddles*, Methods Appl. Anal., 7 (2000), pp. 727–745, <https://doi.org/10.4310/MAA.2000.v7.n4.a7>.
- [34] A. B. OLDE DAALHUIS, *On the Borel transform of the uniform asymptotic expansion of Bessel functions of large order*, in Toward the exact WKB analysis of differential equations, linear or non-linear (Kyoto, 1998), Kyoto Univ. Press, Kyoto, 2000, pp. 120, 189–195, <http://www.kyoto-up.or.jp/book.php?id=661&lang=en>.
- [35] C. J. HOWLS AND A. B. OLDE DAALHUIS, *On the resurgence properties of the uniform asymptotic expansion of Bessel functions of large order*, R. Soc. Lond. Proc. Ser. A Math. Phys. Eng. Sci., 455 (1999), pp. 3917–3930, <https://doi.org/10.1098/rspa.1999.0483>.
- [36] A. B. OLDE DAALHUIS, *On the computation of Stokes multipliers via hyperasymptotics*, Sūrikaiseikikenkyūsho Kōkyūroku, (1999), pp. 68–78, <http://www.maths.ed.ac.uk/~adri/compStokes.pdf>. Resurgent functions and convolution integral equations (Japanese) (Kyoto, 1998).
- [37] A. B. OLDE DAALHUIS, *On the resurgence properties of the uniform asymptotic expansion of the incomplete gamma function*, Methods Appl. Anal., 5 (1998), pp. 425–438, <https://doi.org/10.4310/MAA.1998.v5.n4.a7>.
- [38] A. B. OLDE DAALHUIS AND F. W. J. OLVER, *On the asymptotic and numerical solution of linear ordinary differential equations*, SIAM Rev., 40 (1998), pp. 463–495, <https://doi.org/10.1137/S0036144597315341>.

- [39] A. B. OLDE DAALHUIS, *Hyperasymptotic solutions of higher order linear differential equations with a singularity of rank one*, R. Soc. Lond. Proc. Ser. A Math. Phys. Eng. Sci., 454 (1998), pp. 1–29, <http://www.maths.ed.ac.uk/~adri/NthOrderPaper.pdf>.
- [40] A. B. OLDE DAALHUIS, *Hyperterminants. II*, J. Comput. Appl. Math., 89 (1998), pp. 87–95, [https://doi.org/10.1016/S0377-0427\(97\)00220-3](https://doi.org/10.1016/S0377-0427(97)00220-3).
- [41] H. MAJIMA, C. J. HOWLS, AND A. B. OLDE DAALHUIS, *Vanishing theorems in asymptotic analysis. III*, in Structure of solutions of differential equations (Katata/Kyoto, 1995), World Sci. Publ., River Edge, NJ, 1996, pp. 267–278.
- [42] A. B. OLDE DAALHUIS, *Hyperterminants. I*, J. Comput. Appl. Math., 76 (1996), pp. 255–264, [https://doi.org/10.1016/S0377-0427\(96\)00108-2](https://doi.org/10.1016/S0377-0427(96)00108-2).
- [43] A. B. OLDE DAALHUIS AND F. W. J. OLVER, *On the calculation of Stokes multipliers for linear differential equations of the second order*, Methods Appl. Anal., 2 (1995), pp. 348–367, <https://doi.org/10.4310/MAA.1995.v2.n3.a6>.
- [44] A. B. OLDE DAALHUIS, S. J. CHAPMAN, J. R. KING, J. R. OCKENDON, AND R. H. TEW, *Stokes phenomenon and matched asymptotic expansions*, SIAM J. Appl. Math., 55 (1995), pp. 1469–1483, <https://doi.org/10.1137/S0036139994261769>.
- [45] A. B. OLDE DAALHUIS, *Hyperasymptotic solutions of second-order linear differential equations. II*, Methods Appl. Anal., 2 (1995), pp. 198–211, <https://doi.org/10.4310/MAA.1995.v2.n2.a5>.
- [46] A. B. OLDE DAALHUIS AND F. W. J. OLVER, *Hyperasymptotic solutions of second-order linear differential equations. I*, Methods Appl. Anal., 2 (1995), pp. 173–197, <https://doi.org/10.4310/MAA.1995.v2.n2.a4>.
- [47] A. B. OLDE DAALHUIS, *Asymptotic expansions for q -gamma, q -exponential, and q -Bessel functions*, J. Math. Anal. Appl., 186 (1994), pp. 896–913, <https://doi.org/10.1006/jmaa.1994.1339>.
- [48] A. B. OLDE DAALHUIS AND F. W. J. OLVER, *Exponentially improved asymptotic solutions of ordinary differential equations. II. Irregular singularities of rank one*, Proc. Roy. Soc. London Ser. A, 445 (1994), pp. 39–56, <https://doi.org/10.1098/rspa.1994.0047>.
- [49] A. B. OLDE DAALHUIS AND N. M. TEMME, *Uniform Airy-type expansions of integrals*, SIAM J. Math. Anal., 25 (1994), pp. 304–321, <https://doi.org/10.1137/S0036141090187685>.
- [50] A. B. OLDE DAALHUIS, *Computing with Daubechies' wavelets*, in Wavelets: an elementary treatment of theory and applications, vol. 1 of Ser. Approx. Decompos., World Sci. Publ., River Edge, NJ, 1993, pp. 93–105, <https://www.worldscientific.com/worldscibooks/10.1142/2017>.
- [51] A. B. OLDE DAALHUIS, *Hyperasymptotics and the Stokes' phenomenon*, Proc. Roy. Soc. Edinburgh Sect. A, 123 (1993), pp. 731–743, <https://doi.org/10.1017/S0308210500030936>.
- [52] A. B. OLDE DAALHUIS, *Hyperasymptotic expansions of confluent hypergeometric functions*, IMA J. Appl. Math., 49 (1992), pp. 203–216, <https://doi.org/10.1093/imamat/49.3.203>.
- [53] A. B. OLDE DAALHUIS, *Computing with Daubechies' wavelets*, CWI Quarterly, 5 (1992), pp. 63–72.
- [54] N. M. TEMME AND A. B. OLDE DAALHUIS, *Uniform asymptotic approximation of Fermi-Dirac integrals*, J. Comput. Appl. Math., 31 (1990), pp. 383–387, [https://doi.org/10.1016/0377-0427\(90\)90038-2](https://doi.org/10.1016/0377-0427(90)90038-2).