Publication list of Tom H. Koornwinder, 13 July 2026

email: thkmath@xs4all.nl
URL: https://staff.fnwi.uva.nl/t.h.koornwinder/

Papers in journals, books and proceedings

[P1] A. Dijksma & T. H. Koornwinder, *Spherical harmonics and the product of two Jacobi polynomials*, Indag. Math. 33 (1971), 191–196.

[P2] T. H. Koornwinder, *The addition formula for Jacobi polynomials, I, Summary of results*, Indag. Math. 34 (1972), 188–191.

[P3] M. Flensted-Jensen & T. Koornwinder, *The convolution structure for Jacobi function expansions*, Ark. Mat. 11 (1973), 254–262.

[P4] T. Koornwinder, *Explicit formulas for special functions related to symmetric spaces*, Proc. Sympos. Pure Math. 26 (1973), 351–354.

[P5] T. Koornwinder, *The addition formula for Jacobi polynomials and spherical harmonics*, SIAM J. Appl. Math. 25 (1973), 236–246.

[P6] T. Koornwinder, *Jacobi polynomials, II. An analytic proof of the product formula*, SIAM J. Math. Anal. 5 (1974), 125–137.

[P7] T. H. Koornwinder, *Orthogonal polynomials in two variables which are eigenfunctions of two algebraically independent partial differential operators I, II*, Indag. Math. 36 (1974), 48–58, 59–66.

[P8] T. H. Koornwinder, *Orthogonal polynomials in two variables which are eigenfunctions of two algebraically independent partial differential operators III, IV*, Indag. Math. 36 (1974), 357–369, 370–381.

[P9] T. Koornwinder, *A new proof of a Paley-Wiener type theorem for the Jacobi transform*, Ark. Mat. 13 (1975), 145–159.

[P10] T. Koornwinder, *Jacobi polynomials, III. An analytic proof of the addition formula*, SIAM J. Math. Anal. 6 (1975), 533–543.

[P11] T. Koornwinder, *Two-variable analogues of the classical orthogonal polynomials*, in *Theory and Application of Special Functions*, R. Askey (ed.), Academic Press, 1975, pp. 435–495.

[P12] T. H. Koornwinder, *A note on the absolute bound for systems of lines*, Indag. Math. 38 (1976), 152–153.

[P13] T. H. Koornwinder, *Examination of stability by means of Lyapunov functions*, in *Nonlinear diffusion problems*, O. Diekmann & N. M. Temme (eds.), MC Syllabus 28, Math. Centrum, Amsterdam, 1976, pp. 136–164.

[P14] T. H. Koornwinder, *Yet another proof of the addition formula for Jacobi polynomials*, J. Math. Anal. Appl. 61 (1977), 136–141.

[P15] T. H. Koornwinder, *The addition formula for Laguerre polynomials*, SIAM J. Math. Anal. 8 (1977), 535–540.

[P16] T. H. Koornwinder, *Harmonics and spherical functions on Grassmann manifolds of rank two and two-variable analogues of Jacobi polynomials*, in *Constructive theory of functions of several variables*, W. Schempp & K. Zeller (eds.), Lecture Notes in Math. 571, Springer, 1977, pp. 141-154.

[P17] T. H. Koornwinder, *Positivity proofs for linearization and connection coefficients of orthogonal polynomials satisfying an addition formula*, J. London Math. Soc. (2) 18 (1978), 101–114.

[P18] R. Askey, M. E. H. Ismail & T. H. Koornwinder, *Weighted permutation problems and Laguerre polynomials*, J. Combin. Theory Ser. A 25 (1978), 226–241.

[P19] T. H. Koornwinder & I. G. Sprinkhuizen, *Generalized power series expansions for a class of orthogonal polynomials in two variables*, SIAM J. Math. Anal. 9 (1978), 457–483.

[P20] T. H. Koornwinder & I. Sprinkhuizen-Kuyper, *Hypergeometric functions of* 2×2 *matrix argument are expressible in terms of Appell's function* F_4, Proc. Amer. Math. Soc. 70 (1978), 39–42.

[P21] M. Flensted-Jensen & T. H. Koornwinder, *Jacobi functons: the addition formula and the positivity of the dual convolution structure*, Ark. Mat. 17 (1979), 139–151.

[P22] T. H. Koornwinder, *Lie groups and Lie algebras*, in *Representations of locally compact groups with applications*, T. H. Koornwinder (ed.), MC Syllabus 38, Math. Centrum, Amsterdam, 1979, pp. 97–156.

[P23] T. H. Koornwinder, *General representation theory*, in *Representations of locally compact groups with applications*, T. H. Koornwinder (ed.), MC Syllabus 38, Math. Centrum, Amsterdam, 1979, pp. 243–279.

[P24] T. H. Koornwinder, *Representations of locally compact abelian groups*, in *Representations of locally compact groups with applications*, T. H. Koornwinder (ed.), MC Syllabus 38, Math. Centrum, Amsterdam, 1979, pp. 281–327.

[P25] T. H. Koornwinder & H. A. van der Meer, *Induced representations of locally compact groups*, in *Representations of locally compact groups with applications*, T. H. Koornwinder (ed.), MC Syllabus 38, Math. Centrum, Amsterdam, 1979, pp. 329–376.

[P26] M. Flensted-Jensen & T. H. Koornwinder, *Positive definite spherical functions on a non-compact rank one symmetric space*, in *Analyse harmonique sur les groupes de Lie, II*, P. Eymard, J. Faraut, G. Schiffman & R. Takahashi (eds.), Lecture Notes in Math. 739, Springer, 1979, pp. 249–282.

[P27] T. H. Koornwinder, *A precise definition of separation of variables*, in *Geometrical approaches to differential equations*, R. Martini (ed.), Lecture Notes in Math. 810, Springer, 1980, pp. 240–263

[P28] T. H. Koornwinder, *Clebsch-Gordan coefficients for* $SU(2)$ *and Hahn polynomials*, Nieuw Arch. Wisk. (3) 29 (1981), 140–155.

[P29] T. H. Koornwinder, *The representation theory of* $SL(2,\mathbb{R})$*, a non-infinitesimal approach*, Enseign. Math. (2) 38 (1982), 53–87.

[P30] T. H. Koornwinder, *A note on the multiplicity free reduction of certain orthogonal and unitary groups*, Indag. Math. 44 (1982), 215–218.

[P31] T. H. Koornwinder, *Krawtchouk polynomials, a unification of two different group theoretic interpretations*, SIAM J. Math. Anal. 13 (1982), 1011–1023.

[P32] T. H. Koornwinder, *Real semisimple Lie algebras*, in *The structure of real semisimple Lie groups*, T. H. Koornwinder (ed.), MC Syllabus 49, Math. Centrum, Amsterdam, 1982, pp. 1–23.

[P33] R. Brummelhuis & T. H. Koornwinder, *The generalized Abel transform for* $SL(2,\mathbb{C})$, in *Topics in modern harmonic analysis, Vol. I*, Istituto Nazionale di Alta Matematica Francesco Severi, Roma, 1983, pp. 405–444.

[P34] T. H. Koornwinder, *Orthogonal polynomials with weight function* $(1-x)^\alpha(1+x)^\beta + M\delta(x+1) + N\delta(x-1)$, Canad. Math. Bull. 27 (1984), 205–214.

[P35] T. H. Koornwinder, *Jacobi functions and analysis on noncompact semisimple Lie groups*, in *Special functions: Group theoretical aspects and applications*, R. A. Askey, T. H. Koornwinder & W. Schempp (eds.), Reidel, 1984, pp. 1–85.

[P36] T. H. Koornwinder & J. J. Lodder, *Generalised functions as linear functionals on generalized functions*, in *Anniversary Volume on Approximation Theory and Functional Analysis*, P. L. Butzer, R. L. Stens & B. Sz.-Nagy (eds.), Birkhäuser, Basel, 1984, pp. 151–163.

[P37] T. H. Koornwinder, *Matrix elements of irreducible representations of* $SU(2) \times SU(2)$ *and vector-valued orthogonal polynomials*, SIAM J. Math. Anal. 16 (1985), 602–613.

[P38] T. H. Koornwinder, *Special orthogonal polynomial systems mapped onto each other by the Fourier-Jacobi transform*, in *Polynômes orthogonaux et applications*. C. Brezinski, A. Draux, A. P. Magnus, P. Maroni & A. Ronveaux (eds.), Lecture Notes in Math. 1171, Springer, 1985, pp. 174–183.

[P39] T. H. Koornwinder, *A group theoretic interpretation of Wilson polynomials*, in *Complex analysis and applications '85*, Publishing House of the Bulgarian Academy of Sciences, Sofia, 1986, pp. 335–355. Appeared also as Report PM-R8504, Centre for Math. and Computer Science. Amsterdam, 1985.

[P40] T. H. Koornwinder, *A group theoretic interpretation of the last part of de Branges' proof of the Bieberbach conjecture*, Complex Variables Theory Appl. 6 (1986), 309–321.

[P41] R. Askey, T. H. Koornwinder & M. Rahman, *An integral of products of ultraspherical functions and a q-extension*, J. London Math. Soc. (2) 33 (1986), 133–148.

[P42] T. H. Koornwinder, *Group theoretic interpretations of Askey's scheme of hypergeometric orthogonal polynomials*, in *Orthogonal polynomials and their applications*, M. Alfaro, J. S. Dehesa, F. J. Marcellan, J. L. Rubio de Francia & J. Vinuesa (eds.), Lecture Notes in Math. 1329, Springer, 1988, pp. 46–72.

[P43] T. H. Koornwinder, *Representations of the twisted* $SU(2)$ *quantum group and some q-hypergeometric orthogonal polynomials*, Indag. Math. 51 (1989), 97–117.

[P44] H. T. Koelink & T. H. Koornwinder, *The Clebsch-Gordan coefficients for the quantum group* $S_\mu U(2)$ *and q-Hahn polynomials*, Indag. Math. 51 (1989), 443–456.

[P45] T. H. Koornwinder, *Meixner-Pollaczek polynomials and the Heisenberg algebra*, J. Math. Phys. 30 (1989), 767–769.

[P46] T. H. Koornwinder, *Jacobi functions as limit cases of q-ultraspherical polynomials*, J. Math. Anal. Appl. 148 (1990), 44–54.

[P47] T. H. Koornwinder & G. G. Walter, *The finite continuous Jacobi transform and its inverse*, J. Approx. Theory 60 (1990), 83–100.

[P48] T. H. Koornwinder, *Orthogonal polynomials in connection with quantum groups*, in *Orthogonal polynomials: theory and practice*, P. Nevai (ed.), NATO ASI Series C 294, Kluwer, 1990, pp. 257–292.

[P49] W. Van Assche & T. H. Koornwinder, *Asymptotic behaviour for Wall polynomials and the addition formula for little q-Legendre polynomials*, SIAM J. Math. Anal. 22 (1991), 302–311.

[P50] T. H. Koornwinder, *The addition formula for little q-Legendre polynomials and the $SU(2)$ quantum group*, SIAM J. Math. Anal. 22 (1991), 295–301.

[P51] T. H. Koornwinder, *Handling hypergeometric series in Maple*, in *Orthogonal polynomials and their applications*, C. Brezinski, L. Gori & A. Ronveaux (eds.), IMACS Annals on Computing and Applied Mathematics 9, Baltzer, 1991, pp. 73–80.

[P52] T. H. Koornwinder, *Positive convolution structures associated with quantum groups*, in *Probability Measures on Groups X*, H. Heyer (ed.), Plenum, 1991, pp. 249–268.

[P53] T. H. Koornwinder & R. F. Swarttouw, *On q-Analogues of the Fourier and Hankel transforms*, Trans. Amer. Math. Soc. 333 (1992), 445–461;
corrected version of 13 August 2012: `arXiv:1208.2521v1 [math.CA]`.

[P54] T. H. Koornwinder, *Askey-Wilson polynomials for root systems of type BC*, in *Hypergeometric functions on domains of positivity, Jack polynomials, and applications*, D. St. P. Richards (ed.), Contemp. Math. 138, Amer. Math. Soc., 1992, pp. 189–204.

[P55] E. Badertscher & T. H. Koornwinder, *Continuous Hahn polynomials of differential operator argument and analysis on Riemannian symmetric spaces of constant curvature*, Canad. J. Math. 44 (1992), 750–773.

[P56] P. W. Hemker, T. H. Koornwinder & N. M. Temme, *Wavelets: mathematical preliminaries*, in *Wavelets: an elementary treatment of theory and applications*, T. H. Koornwinder (ed.), World Scientific, 1993, pp. 13–26.

[P57] T. H. Koornwinder, *The continuous wavelet transform*, in *Wavelets: an elementary treatment of theory and applications*, T. H. Koornwinder (ed.), World Scientific, 1993, pp. 27–48.

[P58] T. H. Koornwinder, *Fast wavelet transform and Calderón-Zygmund operators*, in *Wavelets: an elementary treatment of theory and applications*, T. H. Koornwinder (ed.), World Scientific, 1993, pp. 161–182.

[P59] T. H. Koornwinder, *Askey-Wilson polynomials as zonal spherical functions on the $SU(2)$ quantum group*, SIAM J. Math. Anal. 24 (1993), 795–813.

[P60] T. H. Koornwinder, *On Zeilberger's algorithm and its q-analogue*, J. Comput. Appl. Math. 48 (1993), 91–111.

[P61] T. H. Koornwinder & V. B. Kuznetsov, *Gauss hypergeometric function and quadratic R-matrix algebras*, Algebra i Analiz 6 (1994), No.3, 161–184; St. Petersburg Math. J. 6 (1995), No.3, 595–618; `arXiv:math.QA/9403218`.

[P62] M. S. Dijkhuizen & T. H. Koornwinder, *Quantum homogeneous spaces, duality, and quantum 2-spheres*, Geom. Dedicata 52 (1994), 291–315.

[P63] T. H. Koornwinder, *Compact quantum groups and q-special functions*, in *Representations of Lie groups and quantum groups*, V. Baldoni & M. A. Picardello (eds.), Pitman Research Notes in Mathematics Series 311, Longman Scientific & Technical, 1994, pp. 46–128; preprint of Chapters 1 and 2: `arXiv:hep-th/9401114v1`; preprint of Chapters 3 and 4: `arXiv:math/9403216v2 [math.CA]` (corrected version of October 2013).

[P64] M. S. Dijkhuizen & T. H. Koornwinder, *CQG algebras: a direct algebraic approach to compact quantum groups*, Lett. Math. Phys. 32 (1994), 315–330; `arXiv:hep-th/9406042`.

[P65] T. H. Koornwinder, *Special functions associated with root systems: recent progress*, in "From Universal Morphisms to Megabytes — a Baayen Space Odyssey", K. R. Apt, A. Schrijver & N. M. Temme (eds.), CWI, Amsterdam, 1994, pp. 391–404; `arXiv:math.CA/9411227`.

[P66] T. H. Koornwinder, *Discrete hypergroups associated with compact quantum Gelfand pairs*, in *Applications of hypergroups and related measure algebras*, W. C. Connett, M.-O. Gebuhrer & A. L. Schwartz (eds.), Contemporary Mathematics 183, 1995, American Mathematical Society, pp. 213–235; `arXiv:math.QA/9403217`.

[P67] T. H. Koornwinder, *Jacobi polynomials of type BC, Jack polynomials, limit transitions and $O(\infty)$*, in *Mathematical analysis, wavelets and signal processing*, M. E. H. Ismail e.a. (eds.), Contemp. Math. 190, 1995, Amer. Math. Soc., pp. 283–286; `arXiv:math.CA/9307216`.

[P68] J. V. Stokman & T. H. Koornwinder, *Limit transitions for BC type multivariable orthogonal polynomials*, Canad. J. Math. 49 (1997), 373–404.

[P69] T. H. Koornwinder, *Special functions and q-commuting variables*, in *Special Functions, q-Series and Related Topics*, M. E. H. Ismail, D. R. Masson & M. Rahman (eds.), Fields Institute Communications 14, American Mathematical Society, 1997, pp. 131–166; `arXiv:q-alg/9608008`.

[P70] T. H. Koornwinder & A. L. Schwartz, *Product formulas and associated hypergroups for orthogonal polynomials on the simplex and on a parabolic biangle*, Constr. Approx. 11 (1997), 537–567.

[P71] T. H. Koornwinder & N. M. Muller, *The quantum double of a (locally) compact group*, J. Lie Theory 7 (1997), 101–120; 8 (1998), 187; `arXiv:q-alg/9605044`.

[P72] T. H. Koornwinder, F.A. Bais & N. M. Muller, *Tensor product representations of the quantum double of a compact group*, Comm. Math. Phys. 198 (1998), 157–186; `arXiv:q-alg/9712042`.

[P73] J. V. Stokman & T. H. Koornwinder, *On some limit cases of Askey-Wilson polynomials*, J. Approx. Theory. 95 (1998), 310–330.

[P74] T. H. Koornwinder, *Identities of nonterminating series by Zeilberger's algorithm*, J. Comput. Appl. Math. 99 (1998), 449–461; `arXiv:math.CA/9805010`.

[P75] T. H. Koornwinder, *Special functions associated with root systems: a first introduction for non-specialists*, in "Special functions and differential equations", K. Srinivasa Rao,

R. Jagannathan, G. Vanden Berghe & J. Van der Jeugt (eds.), Allied Publishers, New Delhi, 1998, pp. 10–24.

[P76] N. Ciccoli, E. Koelink & T. H. Koornwinder, *q-Laguerre polynomials and big q-Bessel functions and their orthogonality relations*, Methods Appl. Anal. 6 (1999), 109–127; arXiv:math.CA/9805023.

[P77] T. H. Koornwinder, B. J. Schroers, J. K. Slingerland & F. A. Bais, *Fourier transform and the Verlinde formula for the quantum double of a finite group*, J. Phys. A 32 (1999), 8539–8549; arXiv:math.QA/9904029.

[P78] G. Carnovale & T. H. Koornwinder, *A q-analogue of convolution on the line*, Methods Appl. Anal. 7 (2000), 705–726; arXiv:math.CA/9909025.

[P79] T. H. Koornwinder, *Some details of proofs of theorems related to the quantum dynamical Yang-Baxter equation*, Int. J. Math. Math. Sci. 24 (2000), 793–806; MR 2002b:17013; arXiv:math.QA/0007079.

[P80] T. H. Koornwinder, *A second addition formula for continuous q-ultraspherical polynomials*, in *Theory and Applications of Special Functions. A Volume Dedicated to Mizan Rahman*, M. E. H. Ismail and E. Koelink (eds.), Developments in Mathematics, Vol. 13, Springer, 2005, pp. 339–360; arXiv:math.CA/0303211v2.

[P81] T. H. Koornwinder, *q-Special functions*, in: *Encyclopedia of Mathematical Physics*, J.-P. Françoise, G. L. Naber and S. T. Tsou (eds.), Elsevier, Oxford, 2006, Vol. 4. pp. 105–116; arXiv:math.CA/0511148.

[P82] T. H. Koornwinder, *Lowering and raising operators for some special orthogonal polynomials*, in *Jack, Hall-Littlewood and Macdonald polynomials*, V. B. Kuznetsov and S. Sahi (eds.), Contemporary Mathematics 417, American Mathematical Society, 2006, pp. 227–238; arXiv:math.CA/0505378.

[P83] T. Koornwinder, *Proof of formula (4.15)*, Appendix E to the paper: S. de Haro and A. C. Petkou, *Instantons and conformal holography*, J. High Energy Phys. 12 (2006), paper 076.

[P84] T. H. Koornwinder & U. Onn, *LU factorizations, $q = 0$ limits, and p-adic interpretations of some q-hypergeometric orthogonal polynomials*, Ramanujan J. 13 (2007), 365–387; arXiv:math.CA/0405309v4.

[P85] T. H. Koornwinder, *The structure relation for Askey-Wilson polynomials*, J. Comput. Appl. Math. 207 (2007), 214–226; arXiv:math/0601303v3 [math.CA].

[P86] T. H. Koornwinder, *The relationship between Zhedanov's algebra $AW(3)$ and the double affine Hecke algebra in the rank one case*, SIGMA 3 (2007), 063, 15 pages; arXiv:math/0612730v4 [math.QA], 7 Nov 2007.

[P87] T. H. Koornwinder, *Zhedanov's algebra AW(3) and the double affine Hecke algebra in the rank one case. II. The spherical subalgebra*, SIGMA 4 (2008), 052, 17 pages arXiv:0711.2320v3 [math.QA].

[P88] T. H. Koornwinder & M. J. Schlosser, *On an identity by Chaundy and Bullard. I*, Indag. Math. (N.S). 19 (2008), 239–261; arXiv:0712.2125v3 [math.CA].

[P89] M. K. Atakishiyeva, N. M. Atakishiyev & T. H. Koornwinder, *On a q-extension of Mehta's eigenvectors of the finite Fourier transform for q, a root of unity*, J. Phys. A 42 (2009) 454004 (9 pp.); arXiv:0811.4100v2 [math.CA].

[P90] T. H. Koornwinder, *The Askey scheme as a four-manifold with corners*, Ramanujan J. 20 (2009), 409-439; arXiv:0909.2822v2 [math.CA].

[P91] T. Koornwinder, Foreword to the book *Hypergeometric orthogonal polynomials and their q-analogues* by R. Koekoek, P. A. Lesky & R. F. Swarttouw, Springer-Verlag, 2010, pp. v–x; doi: 10.1007/978-3-642-05014-5.

[P92] T. H. Koornwinder, R. Wong. R. Koekoek & R. F. Swarttouw, *Orthogonal polynomials*, Chapter 18 in *NIST Handbook of Mathematical Functions*, Cambridge University Press, 2010; also Chapter 18 in *NIST Digital Library of Mathematical Functions*; http://dlmf.nist.gov/18.

[P93] T. H. Koornwinder & F. Bouzeffour, *Nonsymmetric Askey-Wilson polynomials as vector-valued polynomials*, Appl. Anal. 90 (2011), 731–746; arXiv:1006.1140v2 [math.CA].

[P94] T. H. Koornwinder, *On the limit from q-Racah polynomials to big q-Jacobi polynomials*, SIGMA 7 (2011), 040, 8 pp.; arXiv:1011.5585v4 [math.CA].

[P95] E. Diekema & T. H. Koornwinder, *Generalizations of an integral for Legendre polynomials by Persson and Strang*, J. Math. Anal. Appl. 388 (2012), 125–135; arXiv:1005.2285v3 [math.CA] (March 2018, minor correction).

[P96] E. Diekema & T.H. Koornwinder, *Differentiation by integration using orthogonal polynomials, a survey*, J. Approx. Theory 164 (2012), 637–667; arXiv:1102.5219v3 [math.CA].

[P97] T.H. Koornwinder, *Askey-Wilson polynomial*, Scholarpedia 7 (2012), no.7, 7761.

[P98] T. H. Koornwinder & M.1 J. Schlosser, *On an identity by Chaundy and Bullard. II. More history*, Indag. Math. (N.S.) 24 (2013), 174–180; arXiv:1205.6362v2 [math.CA].

[P99] M. Rösler, T. Koornwinder & M. Voit, *Limit transition between hypergeometric functions of type BC and type A*, Compositio Math. 149 (2013), 1381–1400; arXiv:1207.0487v3 [math.CA].

[P100] T. H. Koornwinder, *Orthogonal polynomials*, in: *Computer algebra in quantum field theory: Integration, summation and special functions* (C. Schneider & J. Blümlein, eds.), Springer-Verlag, 2013, pp. 145–170; slightly corrected version *Orthogonal polynomials, a short survey*, arXiv:1303.2825v2 [math.CA], November 2021.

[P101] E. G. F. Thomas (with an Appendix by T. H. Koornwinder), *A polarization identity for multilinear maps*, Indag. Math. (N.S.) 25 (2014), 468–474; arXiv:1309.1275v4 [math.FA].

[P102] T. H. Koornwinder, *On the equivalence of two fundamental theta identities*, Anal. Appl. (Singap.) 12 (2014), 711–725; arXiv:1401.5368v3 [math.CA].

[P103] L. Cagliero & T. H. Koornwinder, *Explicit matrix inverses for lower triangular matrices with entries involving Jacobi polynomials*, J. Approx. Theory 193 (2015), 20–38; arXiv:1301.4887v5 [math.CA].

[P104] T. H. Koornwinder & S. A. Sauter, *The intersection of bivariate orthogonal polynomials on triangle patches*, Math. Comp. 84 (2015), 1795–1812; arXiv:1307.8429v3 [math.NA].

[P105] T. H. Koornwinder, *Okounkov's BC-type interpolation Macdonald polynomials and their $q = 1$ limit*, Sém. Lothar. Combin. B72a (2015), 27 pp.; arXiv:1408.5993v5 [math.CA].

[P106] T. H. Koornwinder, *Fractional integral and generalized Stieltjes transforms for hypergeometric functions as transmutation operators*, SIGMA 11 (2015), 074, 22 pp.; arXiv:1504.08144v3 [math.CA].

[P107] T. H. Koornwinder, *Dual addition formula for continuous q-ultraspherical polynomials*, in: *Proceedings of the 15th Annual Conference SSFA*, Vol. 16, India, 2017, pp. 1–29; arXiv:2102.12131v1 [math.CA] (first part); arXiv:1803.09636v3 [math.CA] (second part).

[P108] T. H. Koornwinder, *Dual addition formulas associated with dual product formulas*, in: *Frontiers in Orthogonal Polynomials and q-Series*, World Scientific, 2018, Ch. 19, pp. 373–392; arXiv:1607.06053v5 [math.CA].

[P109] T. Koornwinder, A. Kostenko & G. Teschl, *Jacobi polynomials, Bernstein-type inequalities and dispersion estimates for the discrete Laguerre operator*, Adv. Math. 333 (2018), 796–821; slightly extended version in arXiv:1602.08626v3 [math.CA].

[P110] T. H. Koornwinder, *Quadratic transformations for orthogonal polynomials in one and two variables*, in: *Representation theory, Special Functions and Painlevé Equations*, Adv. Stud. Pure Math., Vol. 76, Math. Soc. Japan, Tokyo, 2018, pp. 418-447; arXiv:1512.09294v2 [math.CA].

[P111] T. H. Koornwinder & M. Mazzocco, *Dualities in the q-Askey scheme and degenerate DAHA*, Studies Appl. Math. 141 (2018), 424–473; arXiv:1803.02775v3 [math.CA].

[P112] P. L. Butzer & T. H. Koornwinder, *Josef Meixner: his life and his polynomials*, Indag. Math. (N.S.) 30 (2019), 250–264; arXiv:1609.02588v5 [math.HO] (4 January 2024).

[P113] E. Diekema & T. H. Koornwinder, *Integral representations for Horn's H_2 function and Olsson's F_P function*, Kyushu J. Math. 73 (2019), 1–24; arXiv:1607.07349v6 [math.CA].

[P114] N. Disveld, T. H. Koornwinder & J. V. Stokman, *A nonsymmetric version of Okounkov's* BC*-type interpolation Macdonald polynomials*, Transform. Groups 26 (2021), 1261–1292; arXiv:1808.01221v5 [math.QA].

[P115] T. H. Koornwinder and J. V. Stokman, *General overview of multivariable special functions*, in: Encyclopedia of special functions: The Askey–Bateman project, Vol. II: *Multivariable special functions*, Cambridge University Press, 2021 (published October 2020), pp. 1–18.

[P116] T. H. Koornwinder, *Charting the q-Askey scheme*, in *Hypergeometry, Integrability and Lie Theory*, Contemporary Mathematics 780 (2022), 79–94; arXiv:2108.03858v2 [math.CA].

[P117] T. H. Koornwinder, *Charting the q-Askey scheme. II. The q-Zhedanov scheme*, Indag. Math. (N.S.) 34 (2023), 317–337; 1419–1420; arXiv:2209.07995v3 [math.CA].

[P118] T. H. Koornwinder, *Dual addition formulas: the case of continuous q-ultraspherical and q-Hermite polynomials*, Ramanujan J. 61, (2023), 425–444.

[P119] T.H. Koornwinder, *Charting the q-Askey scheme. III. Verde-Star scheme for q=1*, pp. 107–123 in *Orthogonal polynomials and special functions*, K. Castillo and A. J. Durán (eds.), Coimbra Mathematical Texts, vol 3, Springer-Verlag, 2024; `arXiv:2307.06668v2 [math.CA]`.

[P120] N. Hoshi, M. Katori, T. H. Koornwinder and M. J. Schlosser, *On an identity of Chaundy and Bullard. III. Basic and elliptic extensions*, in: *Applications and q-extensions of hypergeometric functions*, H. S. Cohl, R. S. Costas-Santos and R. S. Maier (eds.), Contemp. Math. 819, Amer. Math. Soc., 2025, pp. 233-254; `arXiv:2304.10003v3 [math.CO]`.

[P121] T.H. Koornwinder, *q-Special functions, an overview*, in: *Encyclopedia of Mathematical Physics (Second Edition), Volume 5*, Elsevier, 2025, pp. 92–113; `arXiv:math/0511148v2 [math.CA]`, 2023; (This updates [P81].)

[P122] T. H. Koornwinder and M. Mazzocco, *Automorphisms of the DAHA of type $\check{C}_1C_1$ and non-symmetric Askey–Wilson functions*, Indag. Math. (N.S.) 36 (2025), 1795–1829; errors corrected in `arXiv:2407.17366v5 [math.CA]` (9 July 2026).

Reports

[R1] T. H. Koornwinder, *The addition formula for Jacobi polynomials, II, The Laplace type integral representation and the product formula*, Report TW 133/72, Math. Centrum, Amsterdam, 1972.

[R2] T. H. Koornwinder, *The addition formula for Jacobi polynomials, III, Completion of the proof*, Report TW 135/72, Math. Centrum, Amsterdam, 1972.

[R3] T. H. Koornwinder, *The addition formula for Jacobi polynomials and the theory of orthogonal polynomials in two variables, a survey*, Report TW 145/74, Math. Centrum, Amsterdam, 1974.

[R4] T. H. Koornwinder, *New proof of the positivity of generalized translation for Jacobi series*, in *Three notes on classical orthogonal polynomials, Part III*, Report TW 150/75, Math. Centrum, Amsterdam, 1975.

[R5] T. H. Koornwinder, *Overzicht van een aantal begrippen en stellingen uit de functionaalanalyse en de distributietheorie*, Report TC 56/76, Math. Centrum, Amsterdam, 1976 (in Dutch).

[R6] T. H. Koornwinder, *The representation theory of $SL(2,\mathbb{R})$, a global approach*, Report ZW 145/80, Mathematisch Centrum, Amsterdam, 1980.

[R7] T. H. Koornwinder, *Invariant differential operators on non-reductive homogeneous spaces*, Report TW 153/81, Math. Centrum, Amsterdam, 1981; MR 82g:43011; `arXiv:math.RT/0008116`.

[R8] P. C. Greiner & T. H. Koornwinder, *Variations on the Heisenberg spherical harmonics*, Report ZW 186/83, Mathematisch Centrum, Amsterdam, 1983.

[R9] T. H. Koornwinder, *Squares of Gegenbauer polynomials and Milin type inequalities*, Report PM-R8412, Centre for Math. and Computer Science, Amsterdam, 1984.

[R10] B. Hoogenboom & T. H. Koornwinder, *Fonctions d'entrelacement sur les groupes de Lie compacts et polynômes orthogonaux de plusieurs variables*, in *Séminaire d'Analyse Harmonique, Ecole d'été, 1984*, Faculté des Sciences de Tunis, Département de Mathématiques, 1988, pp. 78–93. Appeared also as Report PM-R8601, Centre for Math. and Computer Science, Amsterdam, 1986.

[R11] T. H. Koornwinder, *Uniform multi-parameter limit transitions in the Askey tableau*, `arXiv:math.CA/9309213`, 1993.

[R12] T. H. Koornwinder, *On Zeilberger's algorithm and its q-analogue: a rigorous description*, updated preprint version of my 1993 journal paper *On Zeilberger's algorithm and its q-analogue*, January 2001,
`http://www.science.uva.nl/~thk/art/1993/zeilbalgo.pdf`.

[R13] T. H. Koornwinder & N. Touhami, *QDYBE: some explicit formulas for exchange matrix and related objects in case of sl(2), q=1*, `arXiv:math.QA/0007086`, 2000.

[R14] T. H. Koornwinder & N. Touhami, *Fusion and exchange matrices for quantized sl(2) and associated q-special functions*, `arXiv:math.QA/0207159v2`, 2003.

[R15] V. A. Pessers & T. H. Koornwinder, *Approximation systems*, `arXiv:1205.6370v3 [math.CA]`, October 2017.

[R16] T. H. Koornwinder, *Additions to the formula lists in "Hypergeometric orthogonal polynomials and their q-analogues" by Koekoek, Lesky and Swarttouw*,
`arXiv:1401.0815v3 [math.CA]`, October 2025.

Miscellaneous publications

[M1] T. H. Koornwinder, *Jacobi polynomials and their two-variable analogues*, Thesis, University of Amsterdam, 1975.

[M2] T. H. Koornwinder, *The topological degree of a mapping*, in *Nonlinear analysis, Vol. I*, N. M. Temme (ed.), MC Syllabus 26.1, Math. Centrum, Amsterdam, 1976, pp. 7–39.

[M3] T. H. Koornwinder, *Examination of stability by means of Lyapunov functions*, in: *Nonlinear diffusion problems*, O. Diekmann and N. M. Temme (eds.), MC Syllabus 28, Math. Centrum, Amsterdam, 1976, pp. 136–164.

[M4] T. H. Koornwinder, *Review of "Symmetry and separation of variables" by W. Miller, Jr.*, Bull. Amer. Math. Soc., 1 (1979), 1014–1019.

[M5] T. H. Koornwinder, *Review of "Group representations and special functions" by A. Wawrzynczyk*, Bull. London Math. Soc. 17 (1985), 181–183.

[M6] T. H. Koornwinder, *Continuous q-Legendre polynomials are spherical matrix elements of irreducible representations of the quantum $SU(2)$ group*, CWI Quarterly 2 (1989), No. 2, 171–173.

[M7] T. H. Koornwinder, *Review of "Basic hypergeometric series" by G. Gasper & M. Rahman*, Bull. London Math. Soc. 23 (1991), 312–313.

[M8] H. T. Koelink & T. H. Koornwinder, *q-special functions, a tutorial*, in *Deformation theory and quantum groups with applications to mathematical physics*, M. Gerstenhaber & J. Stasheff (eds.), Contemp. Math. 134, Amer. Math. Soc., 1992, pp. 141–142.

[M9] T. H. Koornwinder, *q-special functions and their occurrence in quantum groups*, in *Deformation theory and quantum groups with applications to mathematical physics*, M. Gerstenhaber & J. Stasheff (eds.), Contemp. Math. 134, Amer. Math. Soc., 1992, pp. 143–144.

[M10] T. H. Koornwinder, *Een golflet*, in *"Is en nog nieuws?"*, collection offered to Prof. Dr Th. J. Dekker, 1992 (in Dutch).

[M11] T. H. Koornwinder, *Gelijk en ongelijk in de analyse* (in Dutch), Oratie, Universiteit van Amsterdam, 1993; downloadable from `http://www.science.uva.nl/~thk/art/popular/`.

[M12] T. H. Koornwinder, *Hypergeometric series evaluation by Zeilberger's algorithm*, in *Open problems*, W. Van Assche (ed.), J. Comput. Appl. Math. 48 (1993), 233–234.

[M13] T. H. Koornwinder, *On the recurrence relations connected with Elliott's formula, Appendix to "Error bursts in transmission channels"*, in *Computer algebra in industry*, A. M. Cohen (ed.), Wiley, 1993, pp. 175–178.

[M14] T. H. Koornwinder, *Wiskunde, algemeen en speciaal*, pp. 123–128 in *Onderzoekers, Jaarboek 1996 van de Universiteit van Amsterdam*, Vossiuspers AUP, Amsterdam, 1996 (in Dutch).

[M15] E. Koelink & T. H. Koornwinder, *Review of Representation of Lie Groups and Special Functions, Vols. 1,2,3 by N. Ja. Vilenkin and A. U. Klimyk, Kluwer, 1991, 1992, 1992*, Bull. Amer. Math. Soc. 35 (1998), 265–270.

[M16] T. H. Koornwinder, *Wiskunde en Fictie: enige voorbeelden en kanttekeningen*, in *Liber Amicorum Piet van der Houwen*, Mathematisch Centrum, Amsterdam, 2000.

[M17] G. Gasper, M. E. H. Ismail, T. Koornwinder, P. Nevai & D. Stanton, *The mathematical contributions of Richard Askey*, in *q-Series from a contemporary perspective*, M. E. H. Ismail & D. W. Stanton (eds.), Contemporary Math. 254, Amer. Math. Soc., 2000, pp. 1–18; MR 2001e:01029.

[M18] T. Koornwinder. *De Amsterdamse wiskundige L. E. J. Brouwer, n.a.v. een recente biografie door Dirk van Dalen*, Scoop, Mei 2002, pp. 20–29 (Studievereniging NSA, UvA).

[M19] T. H. Koornwinder, *Nico Temme, the Askey scheme and me, 1968–2005*, in *Liber Amicorum voor Nico Temme*, CWI, Amsterdam, 2005, pp. 125–131; downloadable from `http://remote.science.uva.nl/~thk/art/misc/`.

[M20] T. Koornwinder, *Hou uw preprints openbaar en up-to-date, bijv. op arXiv:math* (in Dutch), Nieuw Arch. Wisk. (5) 6 (2005), no. 4, pp. 324–325; downloadable from `http://remote.science.uva.nl/~thk/art/misc/`.

[M21] T. H. Koornwinder. *How were the MP3 filter coefficients produced?*, in *Liber Amicorum Piet Hemker*, CWI, Amsterdam, 2006, 6 pp.; downloadable from `http://remote.science.uva.nl/~thk/art/misc/`.

[M22] T. H. Koornwinder, *Wiskunde in de laatste zestig jaar: exponentiële groei en structurele vernieuwing* (in Dutch), in *Een cultuurgeschiedenis van de wiskunde*, M. Keestra (ed.), uitgeverij Nieuwezijds, Amsterdam, 2006; preprint downloadable from `http://www.science.uva.nl/~thk/art/popular/`.

[M23] T. H. Koornwinder, *Review of Basic hypergeometric series, second edition by G. Gasper and M. Rahman, Cambridge University Press, 2004*, SIAM Review 50 (2008), 609–612.

[M24] T. H. Koornwinder, *De speciale functie van de wiskunde* (in Dutch), Afscheidscollege, Universiteit van Amsterdam, 12 december 2008; downloadable from `http://www.science.uva.nl/~thk/art/popular/`.

[M25] T. Koornwinder, *Unearthed treasures in the work of a late-13th-century Chinese mathematician?*, SIAM News 42, No. 3, April 2009 (Letter to the Editor).

[M26] T. H. Koornwinder *Orthogonal polynomials in several variables potentially useful in pde*, pp. 251–254 in: *Recent developments in the numerics of nonlinear hyperbolic conservation laws and their use in science and engineering*, Oberwolfach Reports 9 (2012), 211–279.

[M27] T. Koornwinder, B. Braaksma, G. van Dijk, T. Dorlas, J. Faraut, J. L. van Hemmen and J. Stegeman, *In Memoriam Erik G. F. Thomas (1939-2011)*, Nieuw Arch. Wisk. (5) 13 (2012), no. 4, 281–286.

[M28] T. Koornwinder, W. Van Assche and O. Warnaar, *A tribute to Dick Askey*, J. Approx. Theory 93 (2015), 1–3.

[M29] T. H. Koornwinder, *Representations of* SU(2) *and Jacobi polynomials*, Lecture notes, `arXiv:1606.08189v1 [math.CA]`, 2016.

[M30] T. H. Koornwinder, *Very positive memories about Dick Askey*, §2.8 in: *The Legacy of Dick Askey (1933–2019)* (H. S. Cohl, M. E. H. Ismail and H.-H. Wu, eds.), Notices Amer. Math. Soc. 69 (2022), no. 1, 59–75.

[M31] G. Heckman, T. Koornwinder and E. Opdam, *In Memoriam: Ian Grant Macdonald (1928-2023)* (in Dutch), Nieuw Archief voor Wiskunde (5) 25 (2024), No. 2, 87–90.

[M32] G. Heckman, T. Koornwinder and E. Opdam, Memories of Ian G. Macdonald, Q. J. Math. 76 (2025), 785–792.

[M33] T. H. Koornwinder, *Dick and Liz Askey's visit to U.S.S.R. in 1987, and how the discrete Askey scheme also originated in Russia*, `arXiv:2601.05068v1 [math.HO]`, January 2026.

Edited volumes

[E1] T. H. Koornwinder (ed.), *Representations of locally compact groups with applications, Parts I and II*, MC Syllabus 38.1, 38.2, Math. Centrum, Amsterdam, 1979.

[E2] T. H. Koornwinder (ed.), *The structure of real semisimple Lie groups*, MC Syllabus 49, Math. Centrum, Amsterdam, 1982.

[E3] R. A. Askey, T. H. Koornwinder & W. Schempp (eds.), *Special functions: Group theoretical aspects and applications*, Mathematics and Its Applications, Vol. 18, Reidel, Dordrecht, 1984 (Springer-Verlag, 2002), ISBN 1-4020-0319-6, 348 pp.

[E4] T. H. Koornwinder (ed.), *Wavelets: an elementary treatment of theory and applications*, World Scientific, 1993.

[E5] W. Koepf, T. H. Koornwinder & R. Askey (eds.), *Special Issue on Orthogonal Polynomials and Computer Algebra*, J. Symbolic Comput. 28 (1999), No.6.

[E6] T. H. Koornwinder (ed.), *Special theme: ERCIMathematics*, ERCIM News (2002), No. 50; downloadable from `http://www.ercim.org/publication/Ercim_News/enw50/`.

[E7] M. Ismail, T. Koornwinder, P. Nevai, W. Van Assche and O. Warnaar (eds.), *Volumes dedicated to Dick Askey on the occasion of his 80th birthday*, J. Approx. Theory 193, 195, 197 (2015).

[E8] T. H. Koornwinder and J. V. Stokman, Encyclopedia of special functions: The Askey-Bateman project, Vol. II: *Multivariable special functions*, Cambridge University Press, 2021 (published October 2020).