

Mathematical publications, G.J.O. Jameson

Books

- Ordered Linear Spaces*, Springer Lecture Notes no. 141 (Springer, 1970) (194p.)
- A First Course on Complex Functions* (Chapman and Hall, London, 1970) (148p.)
- Topology and Normed Spaces* (Chapman and Hall, London, 1974) (408p.)
- Summing and Nuclear Norms in Banach Space Theory*, London Math. Soc. Student Texts 8 (Cambridge Univ. Press, 1987) (174p.)
- The Prime Number Theorem*, London Math. Soc. Student Texts 53 (Cambridge Univ. Press, 2003) (252p.)

Research articles

- Extension of a theorem of Kakutani to complex-valued functions, *Math. Z.* **99** (1967), 213–215.
- Sets of continuous functions on a compact space into a linear lattice, *Math. Z.* **100** (1967), 29–35.
- Topological M -spaces, *Math. Z.* **103** (1968), 139–150.
- Allied subsets of topological groups and linear spaces, *Proc. London Math. Soc.* (3) **18** (1968), 653–690.
- Nearly directed subspaces of partially ordered linear spaces, *Proc. Edinburgh Math. Soc.* (2) **16** (1968), 135–144.
- Discrete and extremal positive linear mappings, *J. London Math. Soc.* **44** (1969), 559–564.
- Convex series, *Proc. Cambridge Phil. Soc.* **72** (1972), 37–47.
- A variant of a theorem of Sierpiński concerning partitions of continua, *Colloq. Math.* **25** (1972), 79–80.
- The weak-star closure of the unit ball in a hyperplane, *Proc. Edinburgh Math. Soc.* (2) **18** (1972), 7–11.
- The duality of pairs of wedges, *Proc. London Math. Soc.* (3) **24** (1972), 531–547.
- Some short proofs on subseries convergence, *Amer. Math. Monthly* **79** (1972), 53–55.
- Unconditional convergence in partially ordered linear spaces, *Math. Ann.* **200** (1973), 227–233.
- A problem on series, *Amer. Math. Monthly* **80** (1973), 1119.
- An elementary proof of the Arens and Borsuk extension theorems, *J. London Math. Soc.* (2) **14** (1976), 364–368.
- Whitley's technique and K_δ -subspaces of Banach spaces, *Amer. Math. Monthly* **84** (1977), 459–461.
- The weak-star closure of the unit ball in a subspace, *Proc. Edinburgh Math. Soc.* **25** (1982), 87–95.

(with A. Pinkus) Positive and minimal projections in function spaces, *J. Approx. Theory* **37** (1983), 182–195.

The interpolation proof of Grothendieck’s inequality, *Proc. Edinburgh Math. Soc.* **28** (1985), 217–223.

A lower bound for the projection constant of Π_2 , *J. Approx. Theory* **49** (1987), 163–167.

Relations between summing norms of mappings on ℓ_∞^n , *Math. Z.* **194** (1987), 89–94.

A specific form of Grothendieck’s inequality for the two-dimensional case, with applications to C^* -algebras, *Proc. Edinburgh Math. Soc.* **37** (1994), 521–537.

The number of elements required to determine $(p, 1)$ -summing norms, *Illinois J. Math.* **39** (1995), 251–257.

2-convexity and 2-concavity in Schatten ideals, *Math. Proc. Cambridge Phil. Soc.* **120** (1996), 697–701.

Khinchin’s inequality for operators, *Glasgow Math. J.* **38** (1996), 327–336.

The q -concavity constants of Lorentz sequence spaces and related inequalities, *Math. Z.* **227** (1998), 129–142.

Norms and lower bounds of operators on the Lorentz sequence space $d(w, 1)$, *Illinois J. Math.* **43** (1999), 79–99.

(with R. Lashkaripour) Lower bounds of operators on weighted ℓ_p spaces and Lorentz sequence spaces, *Glasgow Math. J.* **42** (2000), 211–223.

(with Grahame Bennett) Monotonic averages of convex functions, *J. Math. Anal. Appl.* **252** (2000), 410–430.

(with R. Lashkaripour) Norms of certain operators on weighted ℓ_p spaces and Lorentz sequence spaces, *J. Ineq. Pure Appl. Math.* vol. **3**, issue 1, article 6 (2002), 1–17.

The ratio between the tail of a series and its approximating integral, *J. Ineq. Pure Appl. Math.* vol. **4**, issue 2, article 25 (2003), 1–12.

(with Shoshana Abramovich and Gord Sinnamon) Inequalities for averages of convex and superquadratic functions, *J. Ineq. Pure Appl. Math.* vol. **5**, issue 4 (2004), 1–14.

(with Shoshana Abramovich and Gord Sinnamon) Refining Jensen’s inequality, *Bull. Math. Soc. Sci. Math. Roumanie*, **47** (95) (2004), 3–14.

The number of zeros of a sum of fractional powers, *Proc. Royal Soc. A* **462** (2006), 1821–1830.

(with T.P. Jameson) An inequality for the gamma function conjectured by D. Kershaw, *J. Math. Ineq.* **6** (2012), 175–181.

(with Alistair Bird and Niels Laustsen) The Giesy-James theorem for general index p , with an application to operator ideals on the p th James space, *J. Operator Theory* **70** (2013), 291–307.

Inequalities comparing $(a + b)^p - a^p - b^p$ and $a^{p-1}b + ab^{p-1}$, *Elemente Math.* **68** (2013), 1–6.

Inequalities for gamma function ratios, *Amer. Math. Monthly* **120** (2013), 936–940.

An inequality for integrals of the form $\int_x^\infty f(t)e^{it} dt$, *J. Math. Ineq.* **10** (2016), 505–509.

Convexity of $\Gamma(x)\Gamma(1/x)$, *Math. Ineq. Appl.*, to appear (2016).

(with Horst Alzer) A harmonic mean inequality for the digamma function and related results, *Rend. Sem. Mat. Univ. Padova*, to appear (2016).

Expository articles and notes

Counting subsets and the binomial theorem, *Math. Gazette* **80** (1996), 395–396.

Counting zeros of generalized polynomials: Descartes' rule of signs and Laguerre's extensions, *Math. Gazette* **90** (2006), 223–234.

(with Nicholas Jameson) Three answers to an integral, *Math. Gazette* **90** (2006), 457–459.

Two squares and four squares: the simplest proof of all? *Math. Gazette* **94** (2010), 119–123.

Even and odd square-free numbers, *Math. Gazette* **94** (2010), 123–127.

Finding Carmichael numbers, *Math. Gazette* **95** (2011), 244–255.

Finding pseudoprimes, *Math. Gazette* **95** (2011), 420–432.

Euler, Ioachimescu and the trapezium rule, *Math. Gazette* **96** (2012), 136–142.

(with Timothy Jameson) Four methods for a trigonometric integral, *Math. Gazette* **97** (2013), 127–131.

Continuous functions that are not differentiable anywhere, *Math. Gazette* **97** (2013), 137–143.

(with Timothy Jameson) Some remarkable integrals derived from a simple algebraic identity, *Math. Gazette* **97** (2013), 205–209.

(with Nick Lord) Evaluation of $\sum_{n=1}^{\infty} \frac{1}{n^2}$ by a double integral, *Math. Gazette* **97** (2013), 504–505.

An approximation to the arithmetic-geometric mean, *Math. Gazette* **98** (2014), 85–95.

Series involving $\zeta(n)$, *Math. Gazette* **98** (2014), 58–66.

Some inequalities for $(a + b)^p$ and $(a + b)^p + (a - b)^p$, *Math. Gazette* **98** (2014), 96–103.

Inequalities for the perimeter of an ellipse, *Math. Gazette* **98** (2014), 227–234.

A fresh look at Euler's limit formula for the gamma function, *Math. Gazette* **98** (2014), 235–242.

Counting divisors, *Math. Gazette* **99** (2015), 11–20.

A simple proof of Stirling's formula for the gamma function, *Math. Gazette* **99** (2015), 68–74.

Euler-Maclaurin, harmonic sums and Stirling's formula, *Math. Gazette* **99** (2015), 75–89.

(with Nick Lord and James McKee) An inequality for $\text{Si}(x)$, *Math. Gazette* **99** (2015), 133–139.

Sine, cosine and exponential integrals, *Math. Gazette* **99** (2015), 276–289.

Evaluating Fresnel-type integrals, *Math. Gazette* **99** (2015), 491–498.

Using double integrals to solve single integrals, *Math. Gazette* **100** (2016).

Contributions to books

Mixed summing norms and finite-dimensional Lorentz spaces, in *Geometric Aspects of Banach Space Theory*, ed. E. Martin-Peinador and A. Rodés, Cambridge Univ. Press (1989), p. 112–124.

A unified proof of the prime number theorem and related series results, in: *Applicable Mathematics in the Golden Age*, ed. J.C. Misra, Narosa Publ. House, New Delhi (2002), 496–514.

Other articles on home page (selection) www.maths.lancs.ac.uk/~jameson/

Elliptic integrals, the arithmetic-geometric mean and the Brent-Salamin algorithm for π (36 pp.)

Hilbert's inequality and related results (40 pp.)

Half-integer estimates for harmonic sums and the digamma function: De Temple's method (10 pp.)

Basic theory of the gamma function derived from Euler's limit definition (23 pp.)

The incomplete gamma functions (14 pp.)

Some results on $\Gamma(1/x)$ and $\psi(1/x)$ (11 pp.)

The Frullani integrals (5 pp.)

The sine and cosine integrals (16 pp.)

Interpolating polynomials and divided differences (23 pp.)

Notes on the large sieve (29 pp.)

Operator-valued extensions of matrix-norm inequalities (9 pp.)

Sums and products of algebraic numbers (6 pp.)

Multiple divisor functions (12 pp.)

The cyclotomic polynomials (18pp.)

Carmichael numbers and pseudoprimes (25 pp.)

Carmichael numbers with three prime factors (29 pp.)