

CURRICULUM VITA

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Vital Statistics

Citizenship: U.S.

Born: Yes.

Died: No.

Education

University of Chicago, B.S., 1961

University of Chicago, M.S., 1963

University of Washington, Ph.D., 1971

Professional Experience

Instructor, Southern Illinois University (Edwardsville), 1963–1966

Teaching Assistant-Instructor, University of Washington, 1967–1971

Temporary Appointment, Illinois State University, 1971–1975

Visiting Assistant Professor, Brigham Young University, 1977–1979

Assistant Professor, Universidad de Puerto Rico, 1979–1981

Associate Professor, Brigham Young University, 1981–1988

Full Professor, Brigham Young University, 1988–present

Areas of Interest

Combinatorics and Number Theory

Physics and Lattices

Cryptography

Publications

1. Parity of paths and circuits in tournaments, *Discrete Math.* **6** (1973), 115–118.
2. Smallest maximal matchings in the graph of the d-dimensional cube, *J. Comb. Theory* **B.14** (1973), 153–156.
3. (with Michael Burmester and Eugene Jacobs) Circles of numbers, *Glasgow Math. J.* **9** (1978), 115–119.
4. (with H. R. P. Ferguson) Generalization of the Euclidean Algorithm for real numbers to all dimensions higher than two, *Bull. Amer. Math. Soc.* **1** (1979), 912–914.
5. (with H. R. P. Ferguson) Multidimensional Euclidean Algorithms, *J. Reine Angew. Math.* **334** (1982), 171–181.
6. (with Douglas Campbell and H. R. P. Ferguson) Newman polynomials on $|z| = 1$, *Indiana U. Math. J.* **32** No. 4 (1983), 517–525.
7. Hamilton paths in tournaments, *ARS Combinatoria* **16-B** (1983), 279–284.
8. (with J. Lamoreaux and A. D. Pollington) A group of two problems in groups, *Amer. Math. Monthly* **93** (1986), 119–120.
9. (with W. Barrett and A. D. Pollington) The spectral radius of a (0,1)-matrix related to Merten's function, *Linear Alg. and Its Applications* **107** (1988), 151–159.
10. (with A. D. Pollington) What is special about 195? Groups, tilings, and a problem of Graham, *Number Theory* (R. A. Mollin, ed.) (1990), 147–155.
11. (with C. M. Fiduccia and J. S. Zito) Geometry and Diameter Bounds of Directed Cayley Graphs of Abelian Groups, *Siam Journal on Discrete Math.*, **11** (1) (1998), 157–167.
12. (with Jack Lamoreaux) Lattice-Simplex Coverings and the 84-shape, *Siam Journal on Discrete Math.*, **13** (2) (2000), 194–201.
13. (with Jack Lamoreaux) Diameter series of lattice covering simplices, *Discrete Mathematics*, **243** (2002) 235–239.
14. Integer Linear Relation Finding and Lattice Reduction, *Rejected by Journal of Computation.*
15. A new approach to generating derivative structures G.L.W.Hart and R.Forcade, *Phys Rev. B* **77** (2008)(12 pages)
16. Constructing Cluster Expansions for Arbitrary Lattices with Minimal User-Input, D.Lerch, O.Wieckhorst, G.W.W.Hart, R.Forcade, S.Müller, *Model. Simul. Mater. Sci. Eng* (2009)
17. Generating derivative structures from multilattices: Algorithm and application to hcp alloys, G.L.W.Hart and R.Forcade, *Phys. Rev. B* **80** (2009)(8 pages)