

June 2009

BIOGRAPHICAL SKETCH OF ANDREW G. EARNEST

EDUCATION

B.S. Elizabethtown College, Elizabethtown, Pennsylvania 1970
M.S. Ohio State University, Columbus, Ohio 1972
Ph.D. Ohio State University, Columbus, Ohio 1975
(Dissertation: "Spinor Norms and Spinor Genera of Integral Quadratic
Forms Under Field Extensions", Professor J. S. Hsia, advisor)

PROFESSIONAL EXPERIENCE

1997-present Chairman, Department of Mathematics, Southern Illinois
University Carbondale
1994-1995 Program Director for Algebra & Number Theory, National Science
Foundation, Washington, D.C.
1991-present Professor of Mathematics, Southern Illinois University
1983-1991 Associate Professor of Mathematics, Southern Illinois University
1981-1983 Assistant Professor of Mathematics, Southern Illinois University
1976-1981 Assistant Professor of Mathematics, University of Southern
California

TEACHING EXPERIENCE

Teaching Interests and Specialties:
Number Theory and Abstract Algebra
Teaching and Training Grants:
National Science Foundation Traineeship, Ohio State University, 1970-
1974
National Science Foundation, "Incorporating Computer Experimentation
into an Upper Division Mathematics Curriculum", 1998-2000
National Science Foundation, "Reaching Out to Academically-
Talented, Financially-Disadvantaged Students for Careers in
Engineering and Mathematics", 2002-2006.
Awards and Honors:
Outstanding Teacher Award, College of Liberal Arts, 1985
Outstanding Teacher Award, College of Science, 1994
Who's Who Among America's Teachers, 2002-2004
Graduate Student Advisement:
12 M.S. students; 2 Ph.D. students

RESEARCH

Research Interests and Specialties:

Algebra and Algebraic Number Theory; Arithmetic Theory of Quadratic Forms

Current Research Projects:

Representation properties of integral quadratic and Hermitian forms; generation of orthogonal and unitary groups

Publications:

40 mathematical papers published in refereed journals

Research Grants:

National Security Agency, "Representation properties of quadratic lattices", 1990-1992

National Security Agency, "Integral quadratic forms and lattices", 1992-1994

Research Awards and Honors:

American Men and Women of Science

Outstanding Alumnus Award, Elizabethtown College Department of Mathematical Sciences, 1994

Invited Addresses:

Special Session on Number Theory, San Antonio, 1976; Southern California Number Theory Conference, Irvine, 1977; Special Session on Quadratic Forms, Columbus, 1978; Special Session on Quadratic Forms, Honolulu, 1979; Special Session on Quadratic Forms, San Francisco, 1981; Southern California Algebra Conference, Los Angeles, 1981; Special Session on Quadratic Forms, Cincinnati, 1982; Conference in Honor of Professor Hans J. Zassenhaus, Columbus, 1982; Special Session on Number Theory, Toronto, 1982; Special Session on Quadratic Forms and Real Algebraic Geometry, Chicago, 1989; Special Session on Quadratic Forms, Santa Barbara, 1991; Special Session on Quadratic Forms, San Antonio, 1993; USA Mathematical Olympiad Ceremony, Washington, D.C., 1995.

International Conferences:

Quadratische Formen, Oberwolfach, Germany, 1981, 1985, 1992; Quadratic Forms and Hermitian K-Theory, Hamilton, Ontario, 1983; Quadratic Forms and Real Algebraic Geometry, Corvallis, 1986; Théorie des Nombres, Quebec, 1987; N.A.T.O. Advanced Study Institute on Number Theory and Applications, Banff, Alberta, 1988; Canadian Number Theory Association, Vancouver, 1989; Integral Quadratic Forms and Lattices, Marseille, France, 1992; Groups 1993, Galway, Ireland, 1993; Canadian Number Theory Association, Halifax, Nova Scotia, 1994; Integral Quadratic Forms and Lattices, Seoul, Korea, 1998; Ganzzahlige quadratische Formen und Gitter, Oberwolfach, Germany, 1999; Symmetries in Science XI, Bregenz, Austria, 1999; Retirement symposium for Professor O.H. Körner, Ulm, Germany, 2000; Réseaux et formes Quadratiques, Marseille, France, 2000; International Conference

on the Algebraic and Arithmetic Theory of Quadratic Forms, Talca, Chile, 2002; Second International Conference on the Algebraic and Arithmetic Theory of Quadratic Forms, Lake Llanquihue, Chile, 2007.

OTHER PROFESSIONAL ACTIVITIES

Member of American Mathematical Society and Sigma Xi

Reviewer for *Mathematical Reviews* and *Zentralblatt fur Mathematik*

Referee for 26 mathematical journals

Reviewer of proposals for National Science Foundation, National Security Agency, National Science & Engineering Research Council of Canada, Chilean Research Council